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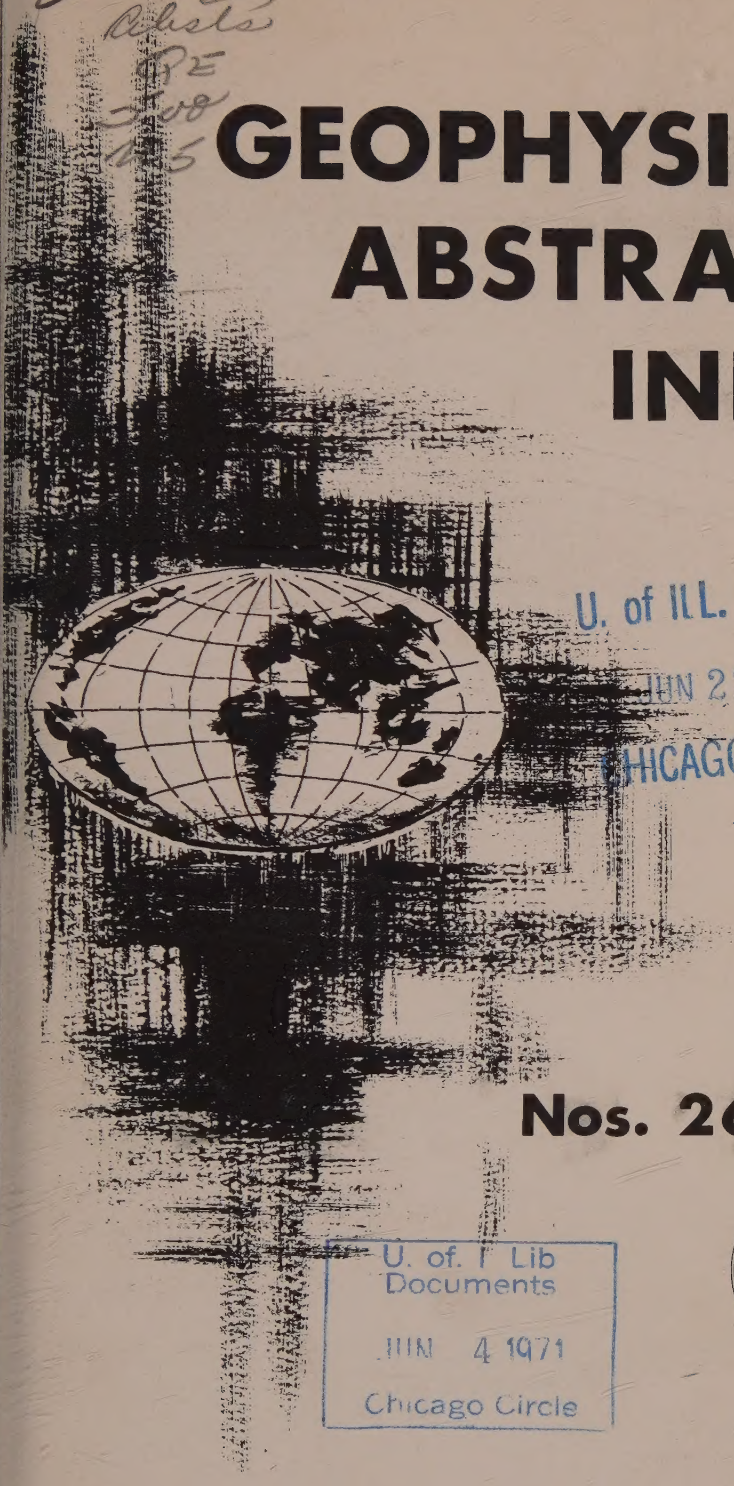

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JAMES W. CLARKE, DOROTHY B. VITALIANO, VIRGINIA S. NEUSCHEL, *and others*

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-331 **Ádám, Antal.** Sq elektromagnitnaya aktivnost' Zemli I [Sq electromagnetic activity of the Earth, (Pt.) 1 (with English summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 103-120, illus., tables, 1967.

-642 **Ádám, Oszkár.** A szeizmikus felszíni zavarhullámok (ground roll) [The seismic ground-disturbing waves (ground roll) (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 2, p. 41-53, illus., 1968.

-048 **Adams, J. A. S.; Burchfiel, B. C.; Sutter, J. E.** Absolute dating of mountain building events, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 453-462, illus., tables, 1967.

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-187 **Adams, R. D.** Early reflections of P′P′ as an indication of upper mantle structure: Seismol. Soc. America Bull., v. 58, no. 6, p. 1933-1947, illus., tables, 1968.

-077 **Adams, R. D.; Eiby, G. A.; Lowry, M. A.** Inangahua earthquake—Preliminary seismological report, *in* Preliminary reports on the Inangahua earthquake, New Zealand, May 1968: New Zealand Dept. Sci. and Indus. Research Bull. 193, p. 3-16, illus., tables, 1968.

-110 **Adams, R. D.; Ahmed, Asghar.** Seismic effects at Mangla Dam, Pakistan: Nature, v. 222, no. 5199, p. 1153-1155, illus., 1969.

-262 **Adams, R. D.** Early reflections of P′P′ as an indication of upper structure—A reply: Seismol. Soc. America Bull., v. 59, no. 3, p. 1419, 1969.

-610 **Adams, Richard M.; Joyner, Gerald.** Geophysical surveying, Chap. 7 *in* Under-Sea Technology—Handbook, Directory, 1968: Arlington, Va., Compass Pubs., p. A51-A60, illus., 1968.

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269-435 **Ade-Hall, J. M.; Khan, M. A.; Dagley, P.; Wilson, R. L.** A detailed opa petrological and magnetic investigation of a single Tertiary lava flow from S Scotland—[Pt.] 2, Spatial variations of magnetic properties and selected relat ships between magnetic and opaque petrological properties: Royal Astron. Geophys. Jour., v. 16, no. 4, p. 389-399, illus., tables, 1968.

269-436 **Ade-Hall, J. M.; Khan, M. A.; Dagley, P.; Wilson, R. L.** A detailed opa petrological and magnetic investigation of a single Tertiary lava flow from S Scotland—[Pt.] 3, Investigations into the possibility of obtaining the intensity o ambient magnetic field (F_{ANC}) at the time of the cooling of the flow: Royal Ast Soc. Geophys. Jour., v. 16, no. 4, p. 401-415, illus., tables, 1968.

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269-027 **Aegerter, S. K.; Loosli, H. H.; Oeschger, H.** Variations in the producti cosmogenic radionuclides, *in* Radioactive dating and methods of low-level c ing—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Inte Atomic Energy Agency, p. 49-55, illus., 1968.

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271-240 **Afanas'yev, A. N.** Voprosy sovremennoy podvizhnosti beregov Ba [Problems of the present mobility of the shores of Baikal], *in* Problemy tonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, 1969): Moscow, Izdatel'stvo "Nauka," p. 127-135, illus., tables, 1968.

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268-332 **Afanas'yev, G. D.** On the boundary delimiting the Earth's crust and the upper mantle, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 31-41, illus., 1968.

269-069 **Afanas'yev, G. D.** The geological time-scale in terms of absolute dating, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 33-43, tables, 1968.

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65-041 **Aitken, M. J.; Zimmerman, D. W.; Fleming, S. J.** Thermoluminescent dating of ancient pottery: Nature, v. 219, no. 5153, p. 442-445, illus., table, 1968.

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66-021 **Aitken, M. J.** Thermoluminescent dating in archaeology—Introductory review, Chap. 7.1 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 369-378, illus., tables, 1968.

69-054 **Aitken, M. J.; Fleming, S. J.; Zimmerman, D. W.** Thermoluminescence dating of ancient ceramics, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 523-530, illus., tables, 1967.

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73-349 **Akasofu, S.-I.; Meng, C.-I.** Non-uniform growth of the ring current belt: Planetary and Space Sci., v. 17, no. 4, p. 707-714, illus., 1969.

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64-331 **Akasofu, Syun-Ichi.** The growth of the storm-time radiation belt and the magnetospheric substorm: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 7-21, illus., 1968.

270-260 **Akasofu, Syun-Ichi.** Magnetospheric substorm as a discharge process: Nature, 221, no. 5185, p. 1020-1022, illus., 1969.

273-329 **Akasofu, Syun-Ichi; Meng, C.-I.** A study of polar magnetic substorms: Jou Geophys. Research, v. 74, no. 1, p. 293-313, illus., table, 1969.

Akasofu, Syun-Ichi. *See* Meng, C.-I. 275-300

Akhmadiyev, Yu. Kh. *See* Arkhipov, V. I. 267-278

Akhmatov, P. G. *See* Lanshchikov, N. T. 267-451

267-643 **Akhmedov, A. K.** Issledovaniya kinematicheskikh i dinamicheskik kharkateristik pryamykh prodol'nykh voln pri seysmokarotazhe glubokikh skvazh [Investigations of the kinematic and dynamic characteristics of direct longitudin waves in seismic logging of deep wells], *in* Nauchno-teoret. Konf. Molodyk Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Aze baydzhan. SSR, p. 74-75, 1967.

Akhmedov, A. K. *See* Mustafayev, K. A. 268-647

275-444 **Akhmedov, A. M.; Aliyev, A. I.; Poloudin, G. A.; Khanlarova, Sh. G.** K perspe tivam neftegazonosnosti produktivnoy tolshchi Dzheyrankechmesskoy depressii Bakinskogo arkhipelaga [On the prospects of oil- and gas-bearing capability of th producing series of the Dzheyrankechmes depression and the Baku Archipelago Neftegazovaya Geologiya i Geofizika, no. 1, p. 16-19, illus., table, 1969.

269-275 **Akhmedov, G. A.; Kulikov, V. I.** Osobennosti glubinnogo stroyeniya Kurinskog mezhgornogo progiba po geofizicheskim materialam [Features of the deep structu of the Kura intermontane depression according to geophysical data (with Engli summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologo Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'st "Nauka," p. 134-139, illus., 1968.

266-107 **Aki, K.** Seismicity and seismological method, *in* Earthquake prediction Proceedings of a symposium, Zürich, Switzerland, 1967: Tectonophysics, v. 6, n 1, p. 41-58, illus., 1968.

264-089 **Aki, Keiiti.** Seismic displacements near a fault: Jour. Geophys. Research, v. 7 no. 16, p. 5359-5376, illus., table, 1968.

269-179 **Aki, Keiiti.** Analysis of the seismic coda of local earthquakes as scattered wav Jour. Geophys. Research, v. 74, no. 2, p. 615-631, illus., tables, 1969.

Aki, Keiiti. *See* Tsai, Yi-Ben. 272-098

275-107 **Aki, Keiiti.** Study of earthquake sources from the seismic spectrum [with Fren abs.], *in* A symposium on processes in the focal region—Internat. Union Geode and Geophysics, 14th Gen. Assembly, Zurich, 1967: Dominion Observatory Otta Pubs., v. 37, no. 7, p. 190-193, 1969.

Akimoto, Syun-ichi. *See* Kushiro, Ikuo. 266-376

271-310 **Akimoto, Syun-iti; Syono, Yasuhiko.** Coesite-stishovite transition: Jour. Geoph Research, v. 74, no. 6, p. 1653-1659, illus., table, 1969.

272-263 **Akimoto, Syun-iti; Sato, Yosiko.** High-pressure transformation in CO_2SiO_4 olivi and some geophysical implications: Physics Earth and Planetary Interiors, v. 1, no. p. 498-504, illus., tables, 1968.

Akiyoshi, Takashi. *See* Goto, Hisao. 267-123

Akopyan, Ts. G. *See* Oganesyan, Sh. S. 264-192

275-392 **Akramodzhayev, A. M.; Kushnirov, I. V.; Arnautov, Ye. I.** O metodike poiskov maloamplitudnykh antiklinal'nykh struktur na Ustyurte [On the procedure for prospecting for small-amplitude anticlinal structures in Ust Urt]: Uzbek. Geol. Zhur., no. 1, p. 3-7, illus., 1968.

268-631 **Aksel'rod, S. M.** K izmereniyu dielektricheskoy pronitsayemosti gornykh porod v usloviyakh skvazhiny [On the measurement of the dielectric permeability of rocks in borehole conditions]: Prikladnaya Geofizika, no. 52, p. 180-191, illus., tables, 1968.

270-516 **Aksel'rod, S. M.** Ob interpretatsii rezul'tatov induktsionnogo karotazha v anizotropnykh porodakh [On the interpretation of the results of induction logging in anisotropic rocks]: Razved. Geofizika, no. 29, p. 109-112, illus., 1968.

Aksenov, V. K. *See* Smirnov, V. A. 265-658

266-167 **Aksent'yeva, Z. N.; Korba, P. S.; Chuprunova, O. V.** Nablyudeniya nad prilivnymi naklonami i variatsiyami sily tyazhesti v Simferopole [Observations on tidal tilts and gravity variations at Simferopol (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. f. Byull., Geofizika i Astronomiya, no. 11, p. 169-175, illus., tables, 1967.

275-039 **Aladag, Erdem; Gordon, Robert B.** Structure of the parent taenite of the Gibeon meteorite: Geochim. et Cosmochim. Acta, v. 33, no. 6, p. 750-752, illus., 1969.

266-326 **Al'bov, S. B.** O dugoobraznom izgibe Krymskikh gor [On the arcuate bend of the Crimean Mountains (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 18-19, 1967.

272-136 **Alcock, E. D.** The influence of geologic environment on seismic response: Seismol. Soc. America Bull., v. 59, no. 1, p. 245-268, illus., 1969.

269-038 **Alder, B.; Oeschger, H.; Wasson, J. T.** Aluminum-26 in deep-sea sediments, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 189-195, illus., tables, 1967.

Aldrich, L. T. *See* Casaverde, M. 273-166

275-395 **Aldrich, Merritt J., Jr.** Pore pressure effects on Berea Sandstone subjected to experimental deformation: Geol. Soc. America Bull., v. 80, no. 8, p. 1577-1586, illus., tables, 1969.

Aleksandrov, A. L. *See* Lyubimova, Ye. A. 272-246

272-248 **Aleksandrov, A. L.** Geotermometr Barta—petrokhimicheskiye metody rascheta sostava polevoshpatovykh faz [The Barth geothermometer—petrochemical method of calculating the composition of the feldspar phases (with English summ.)]: Geokhimiya, no. 7, p. 843-850, illus., tables, 1968.

265-649 **Aleksandrov, B. L.; Nikolenko, K. K.; Gusakov, N. D.** Vozmozhnosti otsenki kharaktera nasyshcheniya glinistykh kollektorov aptskikh otlozheniy ploshchadey Peredovykh Khrebtov Severo-Vostochnogo Predkavkaz'ya po dannym promyslovo-geofizicheskikh issledovaniy [Possibilities of assessing the character of saturation of the shaly reservoirs of the Aptian formations of areas of the Front Ranges of southeastern Ciscaucasia according to the data of geophysical logging investigations]: Neftegazovaya Geologiya i Geofizika, no. 5, p. 52-60, illus., 1968.

265-208 **Aleksandrov, K. S.; Ryzhova, T. V.; Belikov, B. P.; Shabanova, L. A.** Anizotropiya uprugikh svoystv gornykh porod [Anisotropy of the elastic properties of rocks]: Akad. Nauk SSSR Izv. Ser. Geol., no. 6, p. 17-28, illus., tables, 1968.

271-241 **Aleksandrov, S. M.** Osnovnyye cherty noveyshey tektoniki ostrova Sakhalina [Main features of the recent tectonics of the island of Sakhalin], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 136-146, illus., tables, 1968.

Aleksandrov, Ye. P. *See* Apel'tsin, F. R. 267-038

269-164 **Aleksandrov, Yu. N.; Zyatitskiy, V. A.; Rzhiga, O. N.** Osobennosti spektra otrazhennykh Veneroy radiovoln [Features of the spectrums of radiowaves reflected by Venus (with English summ.)]: Astron. Zhur., v. 44, no. 5, p. 1060-1064, illus., 1967.

275-441 **Aleksandrova, K. S.; Shamkova, V. B.** Otsenka kharaktera nasyshchennosti poristo-kavernoznykh izvestnyakov s pomoshch'yu EVM po dannym kompleksa promyslovo-geofizicheskikh issledovaniy [Estimation of the nature of the saturation of porous-cavernous limestones with the aid of a computer, using data of a combination of geophysical logging investigations]: Geologiya Nefti i Gaza, no. 3, p. 50-51, 1969.

Aleksashenko, V. N. *See* Khalevin, N. I. 268-567

270-143 **Alekseyev, A. M.; Yegorov, Yu. M.; Knyazev, V. P.; Smirnov, Yu. I.** Primeneniye ekonomichnoy skhemy v magnitometrakh stantsii MTL-62 [Use of an economical scheme in the magnetometers of the MTL-62 station]: Geofiz. Apparatura, no. 35, p. 150-154, illus., 1968.

270-091 **Alekseyev, A. S.** Obratnyye dinamicheskiye zadachi seysmiki [Inverse dynamic problems of seismics], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 9-84, illus., 1967.

Alekseyev, A. S. *See* Belonosova, A. V. 270-095

Alekseyev, A. S. *See* Belonosova, A. V. 270-096

Alekseyev, B. V. *See* Suvorov, A. A. 270-410

267-628 **Alekseyev, F. A.; Srebrodolskiy, D. M.** Use of radioactive radiations and isotopes in oil and gas exploration, *in* Symposium on development of petroleum resources of Asia and the Far East, 3d, Proc., V. 2, Pts. 2D-2E: United Nations Econ. Comm. Asia and Far East Mineral Resources Devel. Ser., no. 26, v. 2, p. 147-159, illus., tables, 1967.

271-500 **Alekseyev, F. A.; Ochkur, A. P.; Ferronskiy, V. I.** Yadernyye izlucheniya i izotopy v izuchenii zemnoy kory pri poiskakh i razvedke poleznykh iskopayemykh [Nuclear radiations and isotopes in the study of the Earth's crust during prospecting and exploring mineral deposits]: Atomnaya Energiya, v. 26, no. 2, p. 154-161, tables, 1969.

272-479 **Alekseyev, F. A.** (and others). Yadernaya fizika v geologii [Nuclear physics in geology], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 3-19, illus., table, 1968.

272-481 **Alekseyev, F. A.; Churayev, I. V.; Yakovlev, A. I.; Ferronskiy, V. I.; Soyfer, V. N.; Volarovich, M. P.; Flekser, N. Ya.; Romanov, V. V.; Vartazov, S. Ya.; Brezgunov, V. S.; Sayanina, F. A.** Primeneniye izotopov i istochnikov izlucheniya v gidrologii [Use of isotopes and radiation sources in hydrology], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 41-60, illus., tables, 1968.

273-366 **Alekseyev, G. V.; Rotshteyn, A. Ya.** Measurement of the geomagnetic field components while in motion, using celestial orientation: Geomagnetism and Aeronomy, v. 8, no. 5, p. 731-734, illus., 1968.

274-381 **Alekseyev, G. V.; Ivanov, M. M.; Rotshteyn, A. Ya.** Use of the vertical and sola components for the exact measurement of magnetic declination from a moving object: Geomagnetism and Aeronomy, v. 8, no. 6, p. 880-883, tables, 1968.

Alekseyev, V. A. *See* Cherdyntsev, V. V. 265-023

Alekseyev, V. A. *See* Cherdyntsev, V. V. 267-036

269-155 **Alekseyev, V. A.; Aleshina, T. N.; Krotikov, V. D.** Vliyaniye sherokhovatosti verkhnego pokrova Luny na izluchatel'nuyu sposobnost' i raspredeleniye radioyarkosti [Effect of roughness of the upper cover of the Moon on the emissivity capacity and distribution of radiobrightness (with English summ.)]: Astron. Zhur., v. 44, no. 5, p. 1070-1074, illus., 1967.

268-626 **Alekseyev, V. V.; Ochkur, A. P.; Suvorov, A. D.** Application of the x-ray fluorescence and photoneutron methods in studying elemental composition of rocks and ores, *in* Internat. Geol. Cong., 23d, Prague, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 57-65, illus., table, 1968.

269-591 **Alekseyev, V. V.; Ochkur, A. P.; Suvorov, A. D.** Primeneniye rentgenoradiometricheskogo i fotoneytronnogo metodov dlya izucheniya veshchestvennogo sostava gornykh porod i rud [Application of X-ray-fluorescence and photoneutron methods in studying the elemental composition of rocks and ores (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 223-230, illus., table, 1968.

270-174 **Alekseyev, V. V.; Nikonov, A. I.** Osnovnyye rezul'taty razrabotok VIRGa po usovershenstvovaniyu i sozdaniyu novoy geofizicheskoy apparatury [Main results of developments by the VIRG on the improvement and building of new geophysical apparatus]: Geofiz. Apparatura, no. 36, p. 16-33, 1968.

268-039 **Alekseyeva, K. N.; Smirnova, A. V.** Sravitel'naya kharakteristika elektromagnitnykh parametrov zemnykh gornykh porod, meteoritov i lunnoy poverkhnosti [Comparative characteristics of the electromagnetic parameters of terrestrial rocks, meteorites, and the lunar surface]: Geol. Zhur., v. 28, no. 3, p. 38-46, tables, 1968.

270-511 **Alekseyeva, V. I.; Ivanov, Yu. A.; Eventov, Ya. S.** Raschleneniye nizhne- i sredneyurskikh produktivnykh otlozheniy v vostochnoy pribortovoy chasti Prikaspiyskoy vpadiny [Subdivision of the Lower and Middle Jurassic producing formations near the eastern margin of the Caspian basin]: Geologiya Nefti i Gaza, no. 11, p. 22-26, illus., 1968.

265-327 **Aleksidze, M. A.; Sanadze, G. I.** O novom metode perescheta sily tyazhesti v gornoy mestnosti [On a new method of calculating the force of gravity in a mountainous location]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 49-52, 1968.

266-251 **Aleksidze, M. A.; Mindeli, P. Sh.** Ob otsenke pogreshnosti kubatur pri pereschete potential'nykh poley [On the estimation of the cubature of error in recalculating potential fields]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 111-123, tables, 1966.

266-351 **Aleksidze, M. A.; Kartvelishvili, K. M.** K voprosu vychisleniya vysshykh proizvodnykh potentsiala sily tyazhesti [On the problem of calculating the higher derivatives of the gravity potential]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 97-100, illus., tables, 1966.

266-355 **Aleksidze, M. A.** K voprosu ob obrabotke rezul'tatov gravimetricheskoy s"yemki [On the problem of processing the results of a gravimetric survey]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 157-168, 1966.

Aleshina, T. N. *See* Alekseyev, V. A. 269-155

Aleshkina, E. S. *See* Safarov, I. P. 264-596

265-018 **Alessio, M.; Bella, F.; Cortesi, C.; Graziadei, B.** University of Rome carbon-14 dates VI: Radiocarbon, v. 10, no. 2, p. 350-364, 1968.

264-045 **Alexander, E. C.; Manuel, O. K.** Xenon in the inclusions of Canyon Diablo and Toluca iron meteorites: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 113-117, illus., table, 1968.

264-047 **Alexander, E. C., Jr.; Manuel, O. K.** Noble gases in silicate inclusions of Kodiakanal: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 363-367, illus., table, 1968.

Alexander, E. C., Jr. *See* Manuel, O. K. 268-033

270-032 **Alexander, E. C., Jr.; Manuel, O. K.** Xenon in chondrules and matrix material of chondrites: Geochim. et Cosmochim. Acta, v. 33, no. 2, p. 298-301, illus., table, 1969.

270-039 **Alexander, E. C., Jr.; Bennett, J. H.; Manuel, O. K.** On noble gas anomalies in the Great Namaqualand troilite: Zeitschr. Naturforschung, v. 23a, no. 9, p. 1266-1271, tables, 1968.

272-084 **Alexander, M.** Possible contamination of Earth by lunar or Martian life: Nature, v. 222, no. 5192, p. 432-433, 1969.

271-123 **Alexander, Paul B.** Geophysical investigations within the Colorado Mineral Belt using new inductive electromagnetic instrumentation: Earth Sci. Bull., v. 1, no. 2, p. 11-15, illus., table, 1968.

Alexander, S. S. *See* Glover, Peter. 269-357

Alexander, Shelton S. *See* Merkel, Richard H. 274-418

Aleynikov, A. L. *See* Timofeyev, A. N. 267-279

267-338 **Aleynikov, A. L.; Bellavin, O. V.** O svyazi plotnosti upakovki atomov v gornykh porod so skorost'yu prodol'nykh voln [On the relationship of density of packing of atoms in rocks to longitudinal wave velocities], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 350-352, illus., table, 1968.

268-247 **Aleynikov, A. L.; Bellavin, O. V.; Tavrin, I. F.** K voprosu o tektonicheskom razvitii Urala (O roli szhatiya v formirovanii osnovnykh strukutr Urala) [On the problem of the tectonic evolution of the Urals (On the role of compression in the formation of the main structures of the Urals)], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 31-38, illus., 1967.

Aleynikov, A. L. *See* Bellavin, O. V. 268-271

Aleynikov, A. L. *See* Timofeyev, A. N. 268-273

268-350 **Aleynikov, A. L.; Bellavin, O. V.; Kuznetsov, A. A.** Nekotoryye dannyye, podtverzhdayushchiye epiplatformennyy kharakter Ural'skoy geosinklinal'noy oblasti [Some data confirming the epiplatform character of the Ural geosynclinal region], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 9-15, illus., 1967.

275-052 **Alfvén, H.; Arrhenius, G.** Two alternatives for the history of the Moon: Science, v. 165, no. 3888, p. 11-17, illus., 1969.

Algermissen, S. T. *See* Harding, Samuel T. 274-094

Alipbekov, Ye. *See* Al'mukhanbetov, D. 271-140

Aliyev, A. I. *See* Akhmedov, A. M. 275-444

3-324 **Aliyev, A. M.** Opredeleniye tolshchiny zemnoy kory po dispersii voln Lyava [Determination of the thickness of the Earth's crust from Love wave dispersion]: Akad. Nauk Azerbaydzhan. SSR Doklady, v. 24, no. 10, p. 56-59, illus., 1968.

6-046 **Aliyev, E. B.** Nekotoryye dannyye po opredeleniyu absolyutnogo vozrasta gornykh porod metodom sravitel'noy dispersii dvukhprelomleniya [Some data on the determination of absolute age of rocks by the method of comparative dispersion of birefringence]: Uzbek. Geol. Zhur., no. 2, p. 57-61, illus., 1965.

Aliyev, R. G. *See* Mikolayevskiy, E. Yu. 266-571

Aliyev, S. A. *See* Mekhtiyev, Sh. F. 268-302

Aliyev, S. A. *See* Kashkay, M. A. 268-307

9-354 **Aliyev, S. A.; Mekhtiyev, Sh. F.** Nekotoryye voprosy geotermii Kavkaza [Some problems of geothermy in the Caucasus (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 49-54, table, 1968.

Aliyeva, M. A. *See* Moiseyenko, U. I. 270-155

Alksne, Alberta Y. *See* Spreiter, John R. 267-389

Alksne, Alberta Y. *See* Spreiter, John R. 271-333

Alksne, Alberta Y. *See* Spreiter, John R. 272-307

Allam, Ahmed. *See* Shima, Etsuzo. 266-139

Allam, Ahmed. *See* Shima, Etsuzo. 266-512

9-291 **Allard, Gilles O.; Hurst, Vernon J.** Brazil-Gabon geologic link supports continental drift: Science, v. 163, no. 3867, p. 528-532, illus., 1969.

4-316 **Alldredge, L. R.; Saldukas, I.** The automatic standard magnetic observatory: U.S. Coast and Geod. Survey Tech. Bull., no. 31, 35 p., illus., 1966.

0-008 **Allegre, C. L.** Th-230 dating of volcanic rocks—A comment [on paper by A. Taddeucci, W. S. Broecker, D. L. Thurber, 1968]: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 209-210, illus., 1968.

1-027 **Allègre, Claude; Caby, Renaud.** Géochronologie Rb-87:Sr-87 du Précambrien de l'Ahaggar occidental [Rb-87:Sr-87 geochronology of the Precambrian of the western Ahaggar]: Soc. Géol. France Compte Rendu 1968, no. 8, p. 259-260, 1969.

2-259 **Allègre, Claude J.** Comportement des systèmes U-Th-Pb dans le manteau supérieur et modèle d'évolution de ce dernier au cours des temps geoloqiques [Behavior of the U-Th-Pb system in the upper mantle and model of the evolution of the latter during the course of geologic time (with English abs.]: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 261-269, illus., 1968.

-032 **Allègre, Claude Jean; Hamet, Jean; Javoy, Marc.** Étude des rapports isotopiques Sr-87/Sr-86 et O-18/O-16 du massif granitique du Folat et de ses filons—Datation et pétrogenese [Study of the isotopic ratios Sr-87/Sr-86 and O-18/O-16 from the Folat granitic massif and its satellite bodies—Dating and petrogenesis]: Acad. Sci. Comptes Rendus, ser. D, v. 266, no. 22, p. 2180-2183, illus., tables, 1968.

-300 **Allègre, Claude-J.; Duchaylard, Georges; Javoy, Marc; Sarazin, Gérard.** Composition isotopique du soufre et problème de la genèse des galènes—Contribution au débat syngenèse-epigenèse [Isotopic composition of sulfur and problem of the genesis of galenas—Contribution to the syngenesis-epigenesis debate]: Soc. Géol. France Bull., 1967, ser. 7, v. 9, no. 6, p. 789-799, illus., tables, 1968.

Allègre, Claude-J. *See* Javoy, Marc. 274-301

264-429 **Allen, A.** A magnetic survey of north-east Trinity Peninsula, Graham Land—[Pt.] 2, Mount Bransfield and Duse Bay to Victory Glacier: British Antarctic Survey Sci. Repts. 49, 32 p., illus., 1966.

264-483 **Allen, A.** Seismic refraction investigations in the Scotia Sea: British Antarctic Survey Sci. Repts. 55, 44 p., illus., 1966.

266-272 **Allen, Clarence R.** The tectonic environments of seismically active and inactive areas along the San Andreas fault system, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 70-80, illus., 1968.

272-073 **Allen, D. A.; Ney, E. P.** Lunar thermal anomalies—Infrared observations: Science, v. 164, no. 3878, p. 419-421, illus., tables, 1969.

274-476 **Allen, Dennis R.** Collar and radioactive bullet logging for subsidence monitoring, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. G1-G19, illus., 1969.

268-387 **Allen, J. H.** Long-term stability of self-oscillating rubidium magnetometers: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 197-204, illus., table, 1968.

273-032 **Allen, P.** Lower Cretaceous sourcelands and the North Atlantic: Nature, v. 222, no. 5194, p. 657-658, illus., 1969.

Allen, R. V. *See* McClaine, L. A. 264-549

Alley, C. O. *See* Bender, P. L. 264-201

266-312 **Alley, C. O.; Bender, P. L.** Information obtainable from laser range measurements to a lunar corner reflector [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 86-90, illus., 1968.

268-086 **Alley, C. O.; Currie, D. G.** Laser beam pointing tests, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 329-335, illus., 1968.

275-009 **Allsopp, H. L.; Ulrych, T. J.; Nicolaysen, L. O.** Dating some significant events in the history of the Swaziland System by the Rb-Sr isochron method, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 605-619, illus., tables, 1968.

Almeida, F. F. M. de. *See* Cordani, U. G. 273-014

271-140 **Al'mukhanbetov, D.; Alipbekov, Ye.; Nurgaliyev, B.** Rezul'taty elektrorazvedochnykh rabot, provedennykh po profilyu Dzhezkazgan—Kyzyl-Orda [Results of electrical survey operations carried out along the Dzhezkazgan-Kyzyl Ord profile]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 4, p. 22-28, illus., 1968.

275-181 **Al'mukhanbetov, D.** Geofizicheskiye issledovaniya v Dzhezkazganskom rayone [Geophysical investigations in the Dzhezkazgan region]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 2, p. 60-64, 1969.

267-433 **Al'perovich, L. S.** K voprosu o luchakh magnitozvukovykh voln v magnitosfere Zemle [On the problem of rays of magnetoacoustic waves in the Earth's magnetosphere]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 101-103, illus., 1968.

267-636 **Al'pin, L. M.** Obobshcheniye teorii karotazha soprotivleniy [Generalization of the theory of resistivity logging]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 9, p. 104-109, 1968.

268-641 **Al'pin, L. M.** K teorii neosevogo karotazha soprotivleniy [On the theory of nonaxial resistivity logging]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 10, p. 106-113, 1968.

Al-Rawi, Yehya. *See* Gilbert, C. M. 271-182

Alsop, L. E. *See* Chandler, Ramesh. 269-184

269-225 **Alsop, L. E.** An orthonormality relation for elastic body waves: Seismol. Soc. America Bull., v. 58, no. 6, p. 1949-1954, 1968.

274-077 **Alsop, L. E.; Oliver, Jack E.** Joint U.S.-Japan Conference on Premonitory Phenomena Associated with Several Recent Earthquakes and Related Problems: EOS (Am. Geophys. Union Trans.), v. 50, no. 5, p. 376-410, illus., tables, 1969.

272-257 **Alsopp, H. L.; Nicolaysen, L. O.; Hahn-Weinheimer, P.** Rb/K ratios and Sr-isotopic compositions of minerals in eclogitic and peridotitic rocks: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 231-244, illus., tables, 1968.

265-096 **Alter, Dinsmore.** Pictorial guide to the Moon (revised ed.): New York, Thomas Y. Crowell Co., 199 p., illus., tables, 1967.

Al'ter, S. M. *See* Khrychev, B. A. 267-332

272-138 **Alterman, Z. S.; Rotenberg, A.** Seismic waves in a quarter plane: Seismol. Soc. America Bull., v. 59, no. 1, p. 347-368, illus., 1969.

274-137 **Alterman, Z. S.; Aboudi, J.** Seismic pulse in a layered sphere—Normal modes and surface waves: Jour. Geophys. Research, v. 74, no. 10, p. 2618-2636, illus., tables, 1969.

270-471 **Althaus, Voy E.** Electrokinetic potentials in south Louisiana Tertiary sediments: Log Analyst, v. 8, no. 1, p. 29-34, illus., 1967.

273-135 **Alvarez, U.; Menendez, L.** Seysmichnost' Kuby [The seismicity of Cuba]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 74-78, illus., table, 1969.

268-147 **Amasyan, R. O.; Nazarov, A. G.** K stokhasticheskoy teorii seysmostoykosti [On the stochastic theory of seismic resistance]: Akad. Nauk Armyan. SSR Doklady, v. 46, no. 4, p. 168-171, 1968.

273-151 **Amasyan, R. O.** Podbor nizkomodul'nogo materiala s nizkim koeffitsiyentom Puassona dlya tseley modelirovaniya [Selection of a low-modulus material with low Poisson coefficient for modeling purposes], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 5-12, illus., tables, 1968.

271-263 **Ambach, W.; Dansgaard, W.; Eisner, H.; Möller, J.** The altitude effect on the isotopic composition of precipitation and glacier ice in the Alps: Tellus, v. 20, no. 4, p. 595-600, illus., tables, 1968.

266-102 **Ambraseys, N. N.; Sarma, S. K.** Large earthquake forces on gravity dam: Nature, v. 219, no. 5161, p. 1354-1356, illus., table, 1968.

267-113 **Ambraseys, N. N.; Tchalenko, J. S.; Crampin, Stuart; Anderson, George; Shahidi, Mohammed.** Dashti Biaz, Iran, earthquake of August 1968: Nature, v. 220, no. 5170, p. 903-905, illus., table, 1968.

267-116 **Ambraseys, N. N.** An engineering seismology study of the Skoplje earthquake of 26 July 1963, *in* The Skopje earthquake 1963: Amsterdam, Netherlands, UNESCO, p. 35-87, illus., 1968.

268-130 **Ambraseys, N. N.** General characteristics of the Skopje earthquake—A summary, *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 81-83, 1968.

274-081 **Ambraseys, N. N.; Zatopek, A.** The Mudurnu Valley, West Anatolia, Turkey, earthquake of 22 July 1967: Seismol. Soc. America Bull., v. 59, no. 2, p. 521-589, illus., table, 1969.

274-086 **Ambraseys, N. N.; Sarma, S.** Liquefaction of soils induced by earthquakes: Seismol. Soc. America Bull., v. 59, no. 2, p. 651-664, illus., 1969.

Amin, B. S. *See* Radhakrishnamurty, C. 265-434

271-358 **Amirkhanov, B. F.; Ryzhkov, M. V.** Geliyevyy magnitometr [The helium magnetometer]: Geofiz. Apparatura, no. 31, p. 13-19, illus., 1967.

Amirov, A. N. *See* Merkulov, V. I. 270-534

275-451 **Amirov, A. N.; Merkulov, V. I.; Didenko, S. I.** Priyem uprugikh kolebaniy v skvazhinakh [Reception of elastic vibrations in boreholes (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 59-62, illus., 1969.

Ammar, A. A. *See* ElShazly, E. M. 268-528

269-273 **Amurskiy, G. I.; Arest, F. A.; Volovik, V. T.; Glazunova, A. V.; Lykov, V. I.; Starobinets, A. Ye.; Starobinets, M. Ye.** Kriterii vydeleniya zon glubinnykh razlomov, ikh klassifikatsiya i rol' v sovremennoy strukture yuga Turanskoy plity [Criteria for distinguishing abyssal fault zones, their classification and role in the modern structure of the Turan plate (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 117-122, illus., 1968.

273-467 **Amurskiy, G. I.; Borisov, A. A.; Lykov, V. I.; Shelegova, I. F.** Glubinnoye stroyeniye zemnoy kory Kopet-Daga [Deep structure of the Earth's crust in the Kopet Dag]: Moskov. Obshch. Ispitateley Priordy, Byull., Otdel Geol., no. 6, p. 5-15, illus., 1968.

273-133 **Anakhin, V. D.; Solov'yev, S. L.** Skorost' kolebaniya zemnoy poverkhnosti v korotkoperiodnykh prodol'nykh volnakh neglubokogokusnykh Kuril'skikh zemletryaseniy [Velocity of oscillation of the Earth's surface in short-period longitudinal waves of shallow-focus Kurile earthquakes]:Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 13-20, illus., tables, 1969.

264-319 **Anan'yev, F. M.; Kachalo, I. P.; Tychinskiy, A. A.; Shipilov, L. D.** O vozraste i geneticheskikh osobennostyakh svintsovo-tsinkovogo orudeneniya gornogo obramleniya Minusinskikh vpadiny [On the age and genetic features of the lead-zinc mineralization of the mountain framework of the Minusa basins]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 22-30, illus., tables, 1968.

273-214 **Anan'yev, P. M.** O napravlenii i metodike geofizicheskikh rabot s tsel'yu poiskov neftyanykh mestorozhdeniy v Turgayska progibe [On the direction and procedure of geophysical operations for the purpose of prospecting for oil fields in the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 71-74, 1964.

267-202 **Anan'yeva, Ye. M.; Dorofeyev, B. V.; Kalaburdina, A. I.; Kuznetsov, A. A.; Bachin, A. P.; Bel'teneva, Ye. B.; Igoshin, B. L.; Klenchin, N. N.; Cherginets, V. F.** Geofizicheskiye izuchennost' glubinnykh zon Urala i osnovnyye rezul'taty geofizicheskikh issledovaniy [Geophysical study of the deep zones of the Urals and main results of geophysical investigations], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 55-68, illus., 1968.

Anashin, Yu. F. *See* Brodovoy, V. V. 268-195

Anashin, Yu F. *See* Brodovoy, V. V. 269-279

2-515 **Andel, Tjeerd H.; Phillips, Joseph D.; VonHerzen, R. P.** Rifting origin for the Vema fracture in the North Atlantic: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 296-300, illus., 1969.

7-062 **Anders, Edward.** Chemical processes in the early solar system, as inferred from meteorites: Accounts Chem. Research, v. 1, no. 10, p. 289-298, illus., 1968.

Anders, Edward. *See* Heymann, Dieter. 270-026

3-044 **Anders, Edward; Heymann, Dieter.** Elements 112 to 119—Were they present in meteorites,: Science, v. 164, no. 3881, p. 821-823, illus., 1969.

Anders, Edward. *See* Fuse, Kiyono. 275-037

9-114 **Anderson, Albert D.** Dust in the lower atmosphere of Venus: Science, v. 163, no. 3864, p. 275-276, illus., table, 1969.

Anderson, Charles A. *See* Coats, Robert R. 270-439

Anderson, Don L. *See* Spetzler, Hartmut. 266-377

6-382 **Anderson, Don L.; Kanamori, Hiroo.** Shock-wave equations of state for rocks and minerals: Jour. Geophys. Research, v. 73, no. 20, p. 6477-6502, illus., tables, 1968.

7-140 **Anderson, Don L.; Harkrider, David G.** Universal dispersion tables—[Pt.] 2, Variational parameters for amplitudes, phase velocity and group velocity for the first four Love modes for an oceanic and a continental Earth model: Seismol. Soc. America Bull., v. 58, no. 5, p. 1407-1499, illus., tables, 1968.

3-326 **Anderson, Don L.** Chemical inhomogeneity of the mantle: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 89-94, illus., 1968.

Anderson, Don L. *See* Lagus, Peter L. 272-130

Anderson, Don L. *See* McGinley, John R., Jr. 275-092

Anderson, Don L. *See* Hanks, Thomas C. 275-252

5-259 **Anderson, Don L.** Bulk modulus-density systematics: Jour. Geophys. Research, v. 74, no. 15, p. 3857-3864, illus., tables, 1969.

3-009 **Anderson, Franz E.** Seaward terminus of the Vashon continental glacier in the Strait of Juan de Fuca: Marine Geology, v. 6, no. 6, p. 419-438, illus., table, 1968.

Anderson, George. *See* Ambraseys, N. N. 267-113

Anderson, H. R. *See* Hudson, P. D. 273-336

Anderson, John D. *See* Eshleman, Von R. 266-071

-376 **Anderson, K. A.** Energetic electrons of terrestrial origin behind the bow shock and upstream in the solar wind: Jour. Geophys. Research, v. 74, no. 1, p. 95-106, illus., table, 1969.

-337 **Anderson, K. A.** Wave-energetic particle associations in the magnetosphere, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York and Amsterdam, Reinhold Book Corp., p. 429-439, illus., 1968.

275-298 **Anderson, K. A.; Lin, R. D.** Observation of interplanetary field lines in the magnetotail: Jour. Geophys. Research, v. 74, no. 16, p. 3953-3968, illus., tables, 1969.

273-165 **Anderson, L. A.; Johnson, G. R.** Bedrock depth by resistivity soundings, Middle Fork of the Koyukuk River, *in* Some shorter mineral resource investigations in Alaska: U.S. Geol. Survey Circ. 615, p. 5-11, illus., 1969.

268-151 **Anderson, O. L.** Comments on the negative pressure dependence of the shear modulus found in some oxides: Jour. Geophys. Research, v. 73, no. 24, p. 7707-7712, illus., table, 1968.

264-284 **Anderson, Orson L.** Some remarks on the volume dependence of the Gruneisen parameter: Jour. Geophys. Research, v. 73, no. 16, p. 5187-5194, illus., table, 1968.

269-222 **Anderson, Orson L.; Schreiber, Edward; Liebermann, Robert C.** Some elastic constant data on minerals relevant to geophysics: Rev. Geophysics, v. 6, no. 4, p 491-524, illus., tables, 1968.

Anderson, Orson L. *See* Thomsen, Leon. 270-238

Anderson, R. Ernest. *See* Ekren, E. B. 271-023

274-076 **Anderson, Rockne S.; Latham, Gary V.** Determination of sediment properties from first shear-mode Rayleigh waves recorded on the ocean bottom: Jour. Geophys Research, v. 74, no. 10, p. 2747-2767, illus., tables, 1969.

273-248 **Anderson, T. B.** The geometry of a natural orthorhombic system of kink bands, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 200-220, illus.; discussion, p. 220-228, 362, illus.,1969.

275-269 **Anderson, Thomas F.** Self-diffusion of carbon and oxygen in calcite by isotope exchange with carbon dioxide: Jour. Geophys. Research, v. 74, no. 15, p. 3918-393 illus., tables, 1969.

270-494 **Anderson, W. B.** Riley's Scanagraph—A method for automatically digitizing o well logs, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgar Alberta] Canadian Well Logging Soc., p. G1-G7, illus., 1968.

268-624 **Anderson, Wallace L.** Theory of borehole magnetic susceptibility measuremen with coil pairs: Geophysics, v. 33, no. 6, p. 962-971, illus., 1968.

Anderson, Wayne A. *See* Turkevich, Anthony L. 275-076

270-164 **Anderssen, R. S.** On the solution of certain overdetermined systems of linea equations that arise in geophysics: Jour. Geophys. Research, v. 74, no. 4, p. 104 1051, 1969.

271-121 **Anderssen, R. S.** Note on conductivity models for the Earth: Jour. Geophy Research, v. 73, no. 20, p. 6535-6543, tables, 1968.

274-309 **Anderssen, R. S.; Seneta, E.** New analysis for the geomagnetic D_{st} field of th magnetic storm on June 18-19, 1936: Jour. Geophys. Research, v. 74, no. 10, 2768-2773, illus., tables, 1969.

Ando, S. *See* Den, N. 271-506

Andrew, J. A. *See* Steuerwald, B. A. 268-393

273-046 **Andrews, A. D.; Rackham, T. W.; Wayman, P. A.** The meteorite of April 2 1969: Nature, v. 222, no. 5195, p. 727, illus., 1969.

266-261 **Andrews, J. T.** Pattern and cause of variability of postglacial uplift and rate uplift in Arctic Canada: Jour. Geology, v. 76, no. 4, p. 404-425, tables, 1968.

2-018 **Andrews, J. T.** Importance of the radiocarbon standard deviation in determining relative sea levels and glacial chronology from East Baffin Island [with French and Russian abs.]: Arctic, v. 22, no. 1, p. 13-24, illus., table, 1969.

9-688 **Andrews, James Crandall.** A Guatemala volcano twenty years after: Appalachia, Mag. no. 147, p. 212-222, illus., 1968.

3-187 **Andreyev, A. I.; Pushkov, A. N.** Galvanomagnetic effect in natural magnetite: Geomagnetism and Aeronomy, v. 8, no. 5, p. 795-796, illus., 1968.

3-208 **Andreyev, S. I.** Osnovnyye elementy struktury geofizicheskikh poley yuzhnoy chasti Koryakskogo nagor'ya i ikh geologicheskaya interpretatsiya [Fundamental elements of the structure of the geophysical fields in the southern part of the Koryak upland and their geologic interpretation], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 104-122, illus., 1968.

3-401 **Andreyev, S. I.; Genin, B. L.** Primeneniye magnitorazvedki pri izuchenii molodykh vulkanogennykh obrazovaniy yuzhnoy chasti Koryakskogo nagor'ya [Use of magnetic surveying in studying the young volcanogenic formations of the southern part of the Koryak upland], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 188-194, illus., table, 1968.

9-636 **Andreyeva, R. I.** Primeneniye kompleksnoy obrabotki seysmicheskikh i burovykh dannykh dlya paleotektonicheskogo analiza [Use of collective processing of seismic and drilling data for paleotectonic analysis]: Sovetskaya Geologiya, no. 10, p. 130-133, illus., 1968.

9-443 **Andriamirado, R.** Sur l'aimantation des laves de Betafo-Antsirabe et de l'Itasy (centre de Madagascar) [On magnetization of lavas of Betafo-Antsirabe and of Itasy (central Madagascar)]: Malgache Semaine Géol. Comptes Rendus 1967, p. 99-100, 1968.

Andrianova, G. M. *See* Ab, E. A. 272-553

Andriyeva, T. A. *See* Tarasenko, T. V. 275-174

Anisimova, L. V. *See* Golenetskiy, S. I. 270-086

Ansorge, J. *See* Mueller, St. 265-362

5-660 **Antipov, V. I.; Chervonskiy, M. I.** Novyye dannyye o glubinnom stroyenii yugozapadnoy okrainy Russkoy platformy [New data on the deep structure of the southwestern margin of the Russian platform]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 9, p. 17-25, illus., 1964.

8-569 **Antonenko, A. N.; Kurskeyev, A. K.** O povyshennykh znacheniyakh skorostey prodol'nykh voln v gornykh porodakh Tsentral'nogo Kazakhstana [On the high values of longitudinal wave velocities in the rocks of Central Kazakhstan]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 4, p. 67-70, illus., 1968.

0-093 **Antonenko, O. F.** Obrashcheniye odnoy raznostnoy skhemy dlya resheniya odnomernoy dinamicheskoy zadachi seysmiki [Application of a differential scheme for the solution of the one-dimensional dynamic problem of seismics], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 92-98, illus., 1967.

3-299 **Antonov, V. F.** Demfirovaniye uprugikh sistem morskikh gravimetrov [Damping of the elastic system of marine gravimeters]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 92-100, illus., tables, 1969.

269-714 **Antonov, Yu. N.; Izyumov, I. F.** Dvukhchastotnyy dielektricheskiy induktivny karotazh s dvumya zondami [Two-frequency dielectric induction logging with tw sondes]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 4, p 94-101, illus., 1968.

273-362 **Antonova, A. Ye.; Shabanskiy, V. P.** Structure of the geomagnetic field at grea distances from the Earth: Geomagnetism and Aeronomy, v. 8, no. 5, p. 639-647, i lus., 1968.

267-130 **Antonova, L. V.; Aptikayev, F. F.; Kurochkina, R. I.; Nersesov, I. L.; Rautian, T G.; Khaturin, V. I.** Osnovnyye eksperimental'nyye zakonomernosti dinami seysmicheskikh voln [Main experimental regularities of the dynamics of seism waves]: Moscow, Izdatel'stvo "Nauka," 288 p., illus., tables, 1968.

269-084 **Antonyuk, R. M.; Klinger, B. Sh.** K voprosu o vozraste Urtynshal'skoy serii (T sentral'nyy Kazakhstan) [On the problem of the age of the Urtynshal series (Centr Kazakhstan)]: Akad. Nauk SSSR Doklady, v. 180, no. 4, p. 923-925, table, 1968.

270-366 **Antsyferov, M. S.** Die Entwicklung der untertägigen Seismoakustik im Done becken [The development of underground seismoacoustics in the Donets basin Freiberger Forschungshefte, C 225, p. 41-47, illus., 1967.

Anufriyev, G. S. *See* Mamyrin, B. A. 272-287

Aoki, Ken-ichiro. *See* Ueda, Yoshio. 264-035

274-288 **Aoki, Shinko.** Friction between mantle and core of the Earth as a cause of t secular change in obliquity: Astron. Jour., v. 74, no. 2, p. 284-291, illus., 1969.

Aoyama, Iwao. *See* Giesecke, Alberto A. 269-406

Apareyev, V. N. *See* Gerasimov, M. Ye. 267-452

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267-038 **Apel'tsin, F. R.; Malyshev, V. I.; Zykov, S. I.; Stupnikova, N. I.; Skorobogato N. V.; Yegorov, D. B.; Panteleyev, A. I.; Aleksandrov, Ye. P.** Absolyutnyy vozra nekotorykh geneticheskikh tipov granitoidov v Kharbeyskom bloke (Polyarnyy Ura [Absolute age of some genetic types of granitoids in the Kharbey block (Po Urals)]: Sovetskaya Geologiya, no. 6, p. 89-99, illus., tables, 1968.

271-210 **Apel'tsin, F. R.** Granitnyy magmatizm aktivizirovannykh drevnykh struktur po vizhnykh poyasov [Granitic magmatism of activated old structures of mobile be (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sov Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 12 122, 1968.

274-162 **Appa Rao, A.** Some studies on attenuation of elastic waves in rocks: [India] Na Geophys. Research Inst. Bull., v. 5, no. 4, p. 183-194, illus., tables, 1967.

273-172 **Apparao, A.; Roy, A.; Mallick, K.** Resistivity model experiments: Geoexplo tion, v. 7, no. 1, p. 45-54, illus., 1969.

264-229 **Aprodov, V. A.** Glavnyye neotektonicheskiye obstanovki zemnoy kory i verkh mantii Zemli [Main neotectonic setting of the Earth's crust and upper mantl Zhizn' Zemli, no. 4, p. 12-21, table, 1967.

Aptikayev, F. F. *See* Antonova, L. V. 267-130

264-265 **Arabadzh, M. S.; Vasil'yev, Yu. M.; Mil'nichuk, V. S.** Postroyeniye strukturny kart metodom korrelyatsionnogo analiza na primere Prikaspiyskoy vpadiny [Co pilation of structure maps by the method of correlational analysis, exemplified by the Caspian basin]: Prikladnaya Geofizika, no. 50, p. 133-139, illus., 1967.

Arakelyants, M. M. *See* Shanin, L. L. 265-060

272-034 **Arakelyants, M. M.; Barsuk, A. M.; Shanin, L. L.** Noveyshaya granitoidnaya vulkano-plutonicheskaya formatsiya Bol'shogo Kavkaza po dannym kaliy-argonovogo datirovaniya [The young granitoid volcanic-plutonic formation of the Greater Caucasus according to data of potassium-argon dating]: Akad. Nauk SSSR Doklady, v. 182, no. 5, p. 1157-1160, table, 1968.

265-416 **Araki, Tohru.** Diurnal variations of the size of the magnetosphere: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 11-14, illus., table, 1967.

269-407 **Araki, Tohru; Namikawa, Tomikazu.** Magnetic field oscillations near the Earth's bow shock front: Rept. Ionosphere and Space Research Japan, v. 22, nos. 1-2, p. 89-105, illus., 1968.

265-167 **Aramirzoyev, R. A.; Veysov, A. B.; Zolotovitskaya, T. A.; Kasparov, V. A.** Mykhtekyanskiye zemletraseniya 25 i 31 avgusta 1965 g. [The Mykhtekyan earthquakes of August 25 and 31, 1965], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 33-37, illus., 1967.

269-244 **Arandjelović, Dušan.** Conditions for the application of resistivity methods in the Karst area of the Trebišnjica hydro-system: [Yugoslavia] Zavod Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C, nos. 4-5, p. 195-208, illus., 1966.

269-245 **Arandjelović, Dušan.** Resistivity measurement along the route of the 220 kV power line from Grančarevo via Trebinje to Dubrovnik: Yugoslavia] Zavod Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C, nos. 4-5, 1963-64, English edition, p. 223-228, illus., 1966.

Aravamadhu, P. S. *See* Qureshy, M. N. 266-338

266-111 **Archambeau, Charles B.** General theory of elastodynamic source fields: Rev. Geophysics, v. 6, no. 3, p. 241-288, illus., 1968.

269-305 **Archer, David R.** The upper marine limit in Little Whale River area, New Quebec [with French and Russian abs.]: Arctic, v. 21, no. 3, p. 153-160, illus., table, 1968.

Arehanbekov, Sh. U. *See* Mavlyanov, T. A. 264-232

Arest, F. A. *See* Amurskiy, G. I. 269-273

265-097 **Argyle, Edward.** Correlation between solar activity and brightness of Jupiter's great red spot: Nature, v. 219, no. 5153, p. 474, 1968.

267-585 **Aric, K.; Hirschleber, H. B.; Weigel, W.** Ergebnisse seismischer Messungen im Bereich der Grossen Meteor-Bank [Results of seismic measurements in the area of the Great Meteor seamount]: Zeitschr. Geophysik, v. 34, no. 5, p. 531-533, illus., 1968.

264-102 **Arieh, E. J.** Seismicity of Israel and adjacent areas: Israel Geol. Survey Bull., no. 43, p. 1-14, illus., tables, 1967.

Aripzhanov, A. A. *See* Pichugin, N. I. 266-580

Aripzhanov, A. A. *See* Pichugin, N. I. 268-654

Arkani-Hamed, Jafar. *See* Toksoz, M. Nafi. 275-258

275-116 **Arkhangel'skaya, V. M.; Kuznetsova, I. M.** Izucheniye verkhnikh chastey zemnoy kory v Sredney Azii po dispersii poverkhnostnykh voln [Study of the upper parts of the Earth's crust in Central Asia on the basis of surface wave dispersion]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 61-65, illus., table, 1969.

267-335 **Arkhangel'skiy, N. I.; Ivanov, K. P.** Nizhnemezozoyskiye osnovnyye magmaticheskiye porody, kak kosvennyy ukazatel' sostava mantii na nebol'shikh glubinakh pod poverkhnost'yu Mokhorovichicha [The Lower Mesozoic basic magmatic rocks as an indirect indication of the composition of the mantle at small depths under the Mohorovicic surface], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 275-287, 1968.

267-278 **Arkhipov, V. I.; Akhmadiyev, Yu. Kh.; Ovdina, G. K.; Ogarinov, I. S.** Anomaliy sily tyazhesti i glubinnaya tektonika Yuzhnogo Urala [Gravity anomalies and deep tectonics of the Southern Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 94-100, illus., 1968.

264-582 **Arm, Ye. M.; Govorova, R. A.; Yevtushenko, V. F.; Nedostup, G. A.** Termostoykii stsintillyatsionnyy schetnik [Heat resistant scintillation counter]: Geofiz. Apparatura, no. 33, p. 130-132, illus., 1967.

265-674 **Armanda, E.; Ratti, Giuseppe.** Sui carotaggi geofisici per la ricerca dei minerali metalliferi—Prove di applicazione [On geophysical logging for exploration of metalliferous minerals—Test of application]: Industria Mineraria, ser. 2, v. 18, no. 12, p. 529-538, illus., 1967.

275-096 **Armstrong, Baxter H.** Acoustic emission prior to rockbursts and earthquakes: Seismol. Soc. America Bull., v. 59, no. 3, p. 1259-1279, illus., 1969.

Armstrong, R. L. *See* Brueckner, H. K. 268-020

267-596 **Armstrong, R. W.** Wedge dislocation as the elastic counterpart of a crystal deformation twin: Science, v. 162, no. 3855, p. 799-800, illus., 1968.

272-007 **Armstrong, Richard L.; Ekren, E. B.; McKee, Edwin H.; Noble, Donald C.** Space-time relations of Cenozoic silicic volcanism in the Great Basin of the western United States: Am. Jour. Sci., v. 267, no. 4, p. 478-490, illus., 1969.

270-181 **Armstrong, Richard Lee.** Control of sea level relative to the continents: Nature v. 221, no. 5185, p. 1042-1053, 1969.

264-557 **Árnason, Bragi; Sigurgeirsson, Thorbjörn.** Deuterium content of water vapou and hydrogen in volcanic gas at Surtsey, Iceland: Geochim. et Cosmochim. Acta, v 32, no. 8, p. 807-813, illus., table, 1968.

Arnaud, Maurice L. *See* Panciroli, Francesco A. 265-617

272-069 **Arnautov, N. V.; Kireyev, A. D.** Mikrospektral'nyy metod issledovaniya metallicheskikh sharikov iz rayona padeniya Tungusskogo meteorita [Microspectra method of investigating the metallic spherules from the region of the Tungusk meteorite fall]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no 12, p. 130-132, illus., 1968.

Arnautov, Ye. I. *See* Akramodzhayev, A. M. 275-392

Arndt, J. *See* Stoffler, D. 274-044

Arnold, A. *See* Grauert, B. 272-025

266-157 **Arnold, E. P.; Willmore, P. L.; Keylis-Borok, V. I.; Levshin, A. L.; Pyatetski Shapiro, I. I.** Avtomaticheskaya identifikatsiya vstupleniy seysmicheskikh voln [Au tomatic identification of seismic wave arrivals], *in* Nekotoryye pryamyye i obratny zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'nay Seysmologiya, no. 4, p. 170-182, illus., tables, 1968.

Arnold, E. P. *See* Engdahl, Eric R. 267-095

7-096 **Arnold, E. P.** Smoothing travel-time tables: Seismol. Soc. America Bull., v. 58, no. 4, p. 1345-1351, tables, 1968.

Arnold, E. P. *See* Willmore, P. L. 267-125

5-320 **Arnold, K.; Stange, L.** Ein Versuch zur Bestimmung der unbekannten Teile des Schwerefeldes der Erde aus Beobachtungen aufeinanderfolgender Satellitendurchgänge [An attempt to determine the unknown parts of the gravity field of the Earth from observations of successive satellite passes (with English summ.)]: Gerlands Beitr. Geophysik, v. 77, no. 3, p. 185-190, illus., table, 1968.

8-208 **Arnold, Kurt.** Betrachtungen zum Inertialsystem der dynamischen Satellitengeodasie [Considerations on the inertial system of dynamic satellite geodesy (with English abs.)]: Gerlands Beitr. Geophysik, v. 77, no. 4, p. 286-296, illus., 1968.

Arnold, Susan E. *See* McQuillin, R. 274-432

8-282 **Aronov, V. I.; Gordin, V. M.** Ob odnom sposobe postroyeniya vychislitel'nykh skhem dlya interpolirovaniya i transformatsiy potentsial'nykh poley [On a method of constructing calculating schemes for the interpolation and transformation of potential fields]: Prikladnaya Geofizika, no. 53, p. 120-135, illus., tables, 1968.

4-016 **Aronson, James L.** Regional geochronology of New Zealand: Geochim. et Cosmochim. Acta, v. 32, no. 7, p. 669-697, illus., tables, 1968.

5-623 **Arora, J. R.** Signal-to-noise-ratio improvement of a linear seismic array: Pure and Appl. Geophysics, v. 69, p. 25-45, illus., 1968.

4-142 **Arora, S. K.; Manekar, A. M.** Precise determination of epicenters and origin times of surface focus seismic events: Seismol. Soc. America Bull., v. 59, no. 2, p. 777-788, illus., tables, 1969.

Arrhenius, G. *See* Alfven, H. 275-052

Arriens, P. A. *See* Compston, W. 273-011

9-250 **Arsh, E. I.; Krasin, L. A.; Erpert, A. M.** Izmereniye dielektricheskikh svoystv gornykh porod s pomoshch'yu nakladnogo kondensatora [Measurement of the dielectric properties of rocks using a superposed condenser]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 4, p. 91-94, illus., table, 1968.

Arshinova, N. Ya. *See* Sokolovskiy, K. I. 267-268

9-324 **Arslanbekov, Sh. U.; Rayzman, A. P.** Nekotoryye dannyye o sovremennykh tektonicheskikh dvizhennykh krayevykh chastey Kyzylkumskoy platformy [Some data on recent tectonic movements in the marginal parts of the Kyzyl Kum platform]: Uzbek. Geol. Zhur., no. 4, p. 8-14, illus., 1968.

5-025 **Arslanov, Kh. A.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Khlopin Institute radiocarbon dates I: Radiocarbon, v. 10, no. 2, p. 446-447, 1968; originally published in Russian, 1966.

5-026 **Arslanov, Kh. A.; Gromova, L. I.; Rudneyev, Yu. A.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—All-Union Geological Institute radiocarbon dates I: Radiocarbon, v. 10, no. 2, p. 448-450, 1968; originally published in Russian, 1966.

7-042 **Arslanov, Kh. A.; Gromova, L. I.; Polevaya, N. I.; Rudnev, Yu. P.** Opredeleniye absolyutnogo vozrasta po radiouglerodu stsintillyatsionnym metodom [Absolute age determination according to radiocarbon by a scintillation method (with English summ.)]: Geokhimiya, no. 2, p. 198-206, tables, 1968.

268-131 **Arsovski, M.; Grujic, N.; Gojgic, D.** Seismological and geological investigation of the Skopje Valley and urban area, *in* Proceedings of the International Seminar o Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 87-89, 1968

269-131 **Arthur, D. W. G.** A comparator method for determining relative lunar altitude Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, pt. 5, no. 127, p. 239-24 illus., 1968.

269-132 **Arthur, D. W. G.** Relative altitudes from three Yerkes photographs: Arizon Univ. Lunar and Planetary Lab. Commun., v. 7, pt. 5, no. 128, p. 247-267, 1968.

269-133 **Arthur, D. W. G.** Selenodetic measures on 25 star-trailed photographs: Arizon Univ. Lunar and Planetary Lab. Commun., v. 7, pt. 5, no. 129, p. 269-302, illus 1968.

269-134 **Arthur, D. W. G.** A new secondary selenodetic triangulation: Arizona Uni Lunar and Planetary Lab. Commun., v. 7, pt. 5, no. 130, p. 303-312, illus., 1968.

269-135 **Arthur, D. W. G.; Bates, Patricia.** The Tucson selenodetic triangulation: Arizon Univ. Lunar and Planetary Lab. Commun., v. 7, pt. 5, no. 131, p. 313-359, illus 1968.

264-534 **Artsimovich, G. V.; Sklyarov, E. D.; Vin, M. A.** Ustanovka SVD-5000 dlya is ledovaniya vliyaniya zaboynykh usloviy na mekhanicheskiye svoystva gornykh poro [The SVD-5000 apparatus for investigating the effect of conditions beyond the mi face on the mechanical properties of rocks (with English summ.)]: Akad. Nau Ukrain. SSR Geofiz. Sbornik, no. 23, p. 85-89, illus., 1968.

265-690 **Artsybashev, V. A.; Popov, E. P.** Ispol'zovaniye radiometr SRP-2K dlya plotnos nogo gamma-gamma-karotazha [Use of the SRP-2K radiometer for gamma-gamm density logging]: Geofiz. Apparatura, no. 32, p. 122-125, illus., 1967.

268-640 **Artsybashev, V. A.; Popov, E. P.** Issledovaniye formy anomaliy plotnostno gamma-gamma-karotazha [Investigation of the shape of the anomaly of gamm gamma density logging]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 7, 118-122, illus., table, 1968.

270-350 **Artsybashev, V. A.** Optimal'naya konstruktsiya ustanovki dlya izmereniya pl nosti obraztsov gornykh porod γ-γ-metodom [Optimal construction of apparatus f measuring the density of rock samples by the gamma-gamma method]: Geofiz. A paratura, no. 36, p. 160-163, illus., 1968.

270-519 **Artsybashev, V. A.; Ivanyukovich, G. A.** O vybore fil'trov γ-izlucheniya dlya zo dov plotnostnogo γ-γ-metoda [On the choice of gamma-radiation filters for sondes the gamma-gamma density method]: Geofiz. Apparatura, no. 35, p. 55-61, illus., t bles, 1968.

270-474 **Artus, D. S.** Nuclear magnetism logging in the Rocky Mountain area: L Analyst, v. 8, no. 2, p. 16-22, illus., 1967.

267-229 **Artyushkov, Ye. V.** Gravitatsionnaya konvektsiya v nedrakh Zemli [Gravit tional convection in the depths of the Earth]: Akad. Nauk SSSR Izv. Fizika Zem no. 9, p. 3-17, illus., 1968.

274-189 **Arutyunyan, G. V.; Badelyan, S. V.; Gamoyan, V. B.** Ispol'zovaniye gorizonta nykh skvazhin podzemnogo bureniya pri kompleksnykh elektrorazvedochnykh is ledovaniyakh [Use of horizontal boreholes drilled underground in a program of ele trical survey investigations]: Razved. i Okhrana Nedr, no. 2, p. 37-41, illus., 1969.

264-116 **Asada, Toshi; Shima, Etsuzo.** Observation of Niigata aftershocks at mobile s tions, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, e tor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 87-95, illus., bles, 1968.

Asano, Shuzo. *See* Hashizume, Michio. 272-269

Asanuma, T. *See* Den, N. 271-506

Asanuma, Toshio. *See* Den, Nozomu. 271-520

Asatryan, R. G. *See* Oganesyan, Sh. S. 264-192

Asbridge, J. R. *See* Bame, S. J. 265-386

265-388 **Asbridge, J. R.; Bame, S. J.; Strong, I. B.** Outward flow of protons from the Earth's bow shock: Jour. Geophys. Research, v. 73, no. 17, p. 5777-5782, illus., 1968.

Asbridge, J. R. *See* Hundhausen, A. J. 273-330

Ashkinadze, G. Sh. *See* Shukolyukov, Yu. A. 267-368

273-352 **Ashour, A. A.** The depth variation of the intensity of current induced in a model Earth and ocean: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 321-325, tables, 1969.

269-127 **Ashworth, David G.** Permissible modes of nonthermal convection in planetary interiors: Icarus, v. 9, no. 3, p. 535-537, 1968.

269-129 **Ashworth, David G.** The combined effect of thermal and nonthermal convection in planetary interiors: Icarus, v. 9, no. 3, p. 562-569, illus., 1968.

273-099 **Ashworth, David G.** The combined effect of thermal and nonthermal convection in planetary mantles: Icarus, v. 10, no. 1, p. 26-36, 1969.

Aslanyan, A. M. *See* Oganesyan, Sh. S. 264-192

264-147 **Aslanyan, A. T.** Nekotoryye voprosy seysmogeologii Armyanskogo nagor'ya [Some problems of seismogeology of the Armenian Highlands]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 20, nos. 5-6, p. 36-41, 1967.

266-572 **Aspisov, S. K.; Mikhaylov, A. A.** Primeneniye ustanovok vysokogo davleniya v promislovoy geofizike [Use of high pressure apparatus in geophysical well logging]: Razved. Geofizika, no. 25, p. 95-98, 1968.

268-229 **Assunção, C. T. de; Machado, Federico; Serralheiro, A.** New investigations on the geology and volcanism of the Cape Verde Islands, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 9-16, illus., 1968.

264-133 **Astaf'yeva, Ye. G.** (and others). Zemletryaseniya Sredney Azii [Earthquakes in Central Asia], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 50-72, illus., tables, 1967.

265-169 **Astaf'yeva, Ye. G.** (and others). Zemletryaseniya Sredney Azii [Earthquakes in Central Asia], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 44-70, illus., tables, 1967.

264-033 **Aswathanarayana, U.** Radiometric dating of the Precambrians of parts of Andhra Pradesh, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 196-216, illus., tables, 1966.

273-012 **Aswathanarayana, U.** Metamorphic chronology of the Precambrian provinces of South India, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 591-600, illus., tables, 1968.

Asylbayev, U. Kh. *See* Kadyrov, N. B. 267-371

271-345 **Atanasiu, G.** Variation séculaire des éléments géomagnétiques en Transylvanie et au Banat (Roumanie) durant la periode 1848-1968 [Secular variation of the geomagnetic elements in Transylvania and in Banat (Rumania) during the period 1848-1968]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géophysique, v. 12, no. 2, p. 87-104, illus., tables, 1968.

Atchuta Rao, D. *See* Ramakrishnayya, R. 264-424

Atkinson, G. *See* Unti, T. 268-367

274-315 **Atkinson, G.; Unti, T.** Two-dimensional Chapman-Ferraro problem with neutral sheet—[Pt.] 2, The interior field: Jour. Geophys. Research, v. 74, no. 14, p. 3713-3716, illus., 1969.

268-602 **Atsagortsyan, Z. A.; Dalyan, G. P.; Kocharyan, G. B.; Nazaryan, R. A.; Khorenyan, D. V.** Issledovaniya fiziko-mekhanicheskikh svoystv izverzhennykh gornykh porod Armenii [Investigations of the physicomechanical properties of igneous rocks of Armenia], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 298-306, illus., 1968.

Atwater, Tanya. *See* Menard, H. W. 265-289

Atwater, Tanya. *See* Menard, H. W. 274-234

265-307 **Aubouin, Jean.** Geosinklinali—Problemy proiskhozhdeniya i razvitiya [Geosynclines—Problems of origin and evolution]: Moscow, Izdatel'stvo "Mir," 302 p., illus., tables, 1967.

269-590 **Aucott, J. W.** Relationship between gamma activity, geochemical variation and layering in the Galway Granite, Republic of Ireland, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 185-204, illus., tables, 1968.

Audouze, J. *See* Reeves, H. 264-046

274-249 **Aue, L. F.; Troitskiy, V. N.; Sheremet, O. G.** Glubinnoye stroyeniye tsentral'nykh rayonov Vostochno-Evropeyskoy platformy i yego otrazheniye v strukture osadochnogo chekhla [Deep subsurface of the central regions of the East European platform and its reflection in the structure of the sedimentary cover]: Geotektonika, no. 2, p. 107-115, illus., table, 1969.

Auld, D. R. *See* Caner, B. 269-239

265-003 **Aumento, F.; Wanless, R. K.; Stevens, R. D.** Potassium-argon ages and spreading rates on the Mid-Atlantic Ridge at 45° North: Science, v. 161, no. 3848, p. 1338-1339, table, 1968.

Aumento, F. *See* Fleischer, R. L. 265-004

272-518 **Aumento, F.; Loncarevic, B. D.** The Mid-Atlantic Ridge near 45° N.—[Pt.] 3, Bald Mountain: Canadian Jour. Earth Sci., v. 6, no. 1, p. 11-23, illus., tables, 1969.

Auwelant, Van den. *See* Jones, L. 271-195

271-517 **Avasthi, D. N.** Directional shooting for refracted reflections: Indian Geophys. Union Jour., v. 3, no. 3, p. 109-117, illus., 1966.

265-450 **Avchyan, G. M.; Ivanov, N. A.** Apparatura dlya paleomagnitnoy laboratorii [Apparatus for a paleomagnetic laboratory]: Geofiz. Apparatura, no. 32, p. 52-62, 1967.

267-151 **Avchyan, G. M.; Matveyenko, A. A.; Stefankevich, Z. B.** Vliyaniye plastovogo davleniya na fizicheskiye svoystva peschanikov [Effect of formation pressure on the physical properties of sandstones]: Razved. Geofizika, no. 26, p. 82-93, illus., tables, 1968.

268-167 **Avchyan, G. M.; Matveyenko, A. A.; Stefankevich, Z. B.** Vliyaniye davleniya i temperatury na fizicheskiye svoystva osadochnykh gornykh porod, nasyshchennykh zhidkost'yu [Effect of pressure and temperature on the physical properties of sedimentary rocks saturated with a liquid], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 173-177, illus., 1968.

265-057 **Avdeyeva, O. I.** Metody opredeleniya kaliya primenyayemu pri geokhronologicheskikh issledovaniyakh [Methods of determining potassium for geochronological research], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 22-27, 1967.

264-260 **Avdulov, M. V.** Otsenka tochnosti gravimetricheskikh kart [Estimation of the accuracy of gravimetric maps]: Razved. Geofizika, no. 23, p. 60-64, illus., 1967.

272-271 **Avdulov, M. V.; Semenchenko, V. K.** Fazovyye perekhody i problema obrazovaniya magmy [Phase transitions and the problem of the formation of magma]: Akad. Nauk SSSR Doklady, v. 182, no. 5, p. 1153-1156, 1968.

274-293 **Avdulov, M. V.** Stroyeniye zemnoy kory Kavkaza i Kryma po rezul'tatam geofizicheskikh issledovaniy [Crustal structure in the Caucasus and Crimea according to results of geophysical investigations]: Geotektonika, no. 2, p. 119-123, illus., 1969.

264-489 **Averbukh, A. G.** Ob uravnenii godografa refragirovannoy volny [On an equation of a refringent-wave traveltime curve]: Prikladnaya Geofizika, no. 50, p. 77-90, illus., table, 1967.

Averbukh, A. G. *See* Fedorova, D. P. 267-173

268-558 **Averbukh, A. G.** Postroyeniye prelomlyayushchey granits po godografam slabo refragirovannykh voln [Plotting refracting boundaries from traveltime curves of weakly refringent waves]: Prikladnaya Geofizika, no. 53, p. 23-36, illus., 1968.

275-154 **Averbukh, A. G.** Stroyeniye zony sochleneniya raznovozrastnykh fundamentov na yuge Russkoy platformy [Structure of the zone of junction between basements of different age in the southern part of the Russian platform]: Sovetskaya Geologiya, no. 2, p. 125-128, illus., 1969.

Averbukh, I. O. *See* Mirchink, M. F. 265-468

Averkin, V. D. *See* Vorob'yev, A. A. 270-163

270-535 **Averko, Ye. M.; Matoshin, V. M.** K voprosu o peredache informatsii na poverkhnost' pri akusticheskom karotazhe skvazhin [On the problem of the transmission of information to the surface in acoustic well logging]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 114-117, 1968.

275-456 **Averko, Ye. M.; Matoshin, V. M.** Skvazhinnyye polyarizatsionnyye ul'trazvukovyye datchiki [Borehole polarization ultrasonic instruments (with English summ., p. 152)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 120-124, illus., 1969.

270-418 **Avershin, S. G.** Nekotoryye voprosy ucheta polzuchesti pri raschete napryazheniy i peremeshcheniy gornykh porod, okruzhayushchikh podzemnyye vyrabotki [Some problems of taking into account creep in calculating stresses and displacements of rocks surrounding underground workings], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 3-21, illus., 1967.

275-370 **Aver'yanov, A. G.** Seysmicheskoye modelirovaniye sloistoy srede s blokom [Seismic modeling of a layered medium with a block]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 86-95, illus., tables, 1969.

266-474 **Aver'yanov, V. S.** O prirode inversionnogo tipa termoostatochnoy namagnichennosti (ITRM) magnetita [On the nature of the inversion type of thermoremanent magnetization (ITRM) of magnetite]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 76-82, illus., 1968.

269-202 **Aver'yanova, V. N.** Zakonomernosti raspredeleniya Kurilo-Kamchatskikh seysmodislokatsiy i svyaz' ikh s glubinnym stroyeniyem zony [Regularities of distribution of Kurile-Kamchatka seismic dislocations and their relationship to the deep structure of the zone (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologickeskiy Rezul'taty Prikladnoy Geofizikii: Moscow, Izdatel'stvo "Nauka," p. 140-146, illus., 1968.

271-098 **Aver'yanova, V. N.** Zakonomernosti oriyentatsii dvizheniy pri Kurilo-Kamchatskikh zemletryaseniyakh i vozmozhnost' rayonirovaniya tsunamigennosti [Regularities of orientation of movements in Kurile-Kamchatka earthquakes and the possibility of zoning tsunami-generating ability], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 105-120, illus., tables, 1968.

275-429 **Avila Salinas, Waldo.** El volcán explosivo de Sacabaya [The explosive volcano of Sacabaya]: Soc. Geol. Boliviana Bol., no. 8, p. 36-40, illus., 1968.

Avramenko, V. I. *See* Agul'nik, I. M. 268-283

275-246 **Avramenko, V. I.** O vydelenii regional'nykh gravitatsionnykh anomaliy [On bringing out regional gravity anomalies (with English summ., p. 152)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 110-115, illus., 1969.

269-661 **Avrov, P. Ya.; Bulekbayev, Z. Ye.; Tasybayev, B. S.; Turemuratov, Zh. S.** Nekotoryye novyye dannyye tektoniki severo-zapadnoy chasti Turanskoy plity po seysmicheskim dannym [Some new data on the tectonics of the northwestern part of the Turan plate according to seismic data]: Akad. Nauk Kazakh SSR Izv. Ser. Geol., no. 4, p. 38-42, illus., 1968.

Awad, I. S. *See* Sherif, M. A. 268-576

Awad, William K. *See* Sabry Youssef, M. 270-126

Axford, W. I. *See* Johnson, H. E. 272-276

272-314 **Axford, W. I.** Magnetospheric convection: Rev. Geophysics, v. 7, nos. 1-2, p. 421-459, illus., 1969.

267-063 **Axon, H. J.** Metallurgy of meteorites: Prog. Materials Sci., v. 13, no. 4, p. 183-228, illus., tables, 1967.

270-037 **Axon, H. J.; Elliott, D.; Smith, P. L.** Structural variations in iron meteorites: Nature, v. 221, no. 5184, p. 941, illus., 1969.

273-092 **Axon, H. J.; Boustead, J.; Yardley, E. D.** The mechanical and thermal alteration of iron meteorite structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 585-599, illus., 1968.

274-043 **Axon, H. J.** The metals and materials of meteorites: Metals and Materials, v. 1, no. 3, p. 82-86, illus., 1967.

Aydin'yan, N. Kh. *See* Ozerova, N. A. 275-285

Ayob, Mohammed Bin. *See* Haile, N. S. 270-014

Ayukawa, Masaru. *See* Kaneoka, Ichiro. 264-036

-231 **Ayzenberg, M. A.** O nekotoroy zakonomernosti formirovaniya struktur osadochnoy tolshchi [On some regularity of the formation of structures of the sedimentary layer]: Razved. Geofizika, no. 27, p. 57-65, illus., 1968.

-315 **Azhgireĭ, G. D.** Folding and mountain building (orogenesis), *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 3, Orogenic belts: Prague, Academia, p. 287-298, illus., 1968.

Azimi, Sh. A. *See* Kalinin, A. V. 267-630

-368 **Azimi, Sh. A.; Kalinin, A. V.; Kalinin, V. V.; Pivovarov, B. L.** Primeneniye lineynogo differentsial'nogo operatora dlya vremennogo szhatiya seysmicheskikh impul'sov [Use of a linear differential operator for time compression of seismic pulses]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 29-38, illus., 1969.

Azimov, P. K. *See* Khodzhayev, A. R. 269-660

-083 **Azmon, E.** Lunar vesiculation processes as related to Luna and Surveyor probe data, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 7-14, illus., 1967.

-228 **Azzaroli, A.** On the evolution of the Gulf of Aden, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 125-134, illus., 1968.

Baadsgaard, H. *See* Shafiqullah, M. 267-029

Baadsgaard, H. *See* Folinsbee, R. E. 268-213

Baadsgaard, H. *See* Shafiqullah, M. 269-071

Baadsgaard, H. *See* Condie, Kent C. 272-010

Baadsgaard, H. *See* O'Nions, R. K. 272-016

Baadsgaard, H. *See* Green, D. C. 273-027

380 **Baag, C. G.; Cho, D. H.** Report on magnetic prospecting in mine-claim No. 12, Dong-Bok sheet [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 153-158, illus., tables, 1968.

463 **Baag, Czang-go; Scharon, LeRoy; Kienzle, Jack.** Anomalous remanent magnetization of Cretaceous rocks of 8-5 and 5-15 aeromagnetic anomalies, Korea [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 85-106, illus., tables, 1967.

710 **Babak, A. P.; Banar, Z. Sh.; Mel'nikov, A. G.; Sarumova, K.; Sokhranov, N. N.** Poluavtomaticheskiy preobrazovatel' karotazhnykh diagramm [Semiautomatic converter of logging diagrams]: Razved. Geofizika, no. 27, p. 90-105, illus., tables, 1968.

251 **Babak, V. I.; Paisova, E. K.** Rel'yef i neotektonika Tsentral'no-Kazakhstanogo nagor'ya (vodorazdel rek Irtyshskogo, Balkhashskogo i Nurinskogo basseynov) [Relief and neotectonics of the Central Kazakhstan Highlands (watershed of the rivers of the Irtysh, Balkhash, and Nurinsk basins)], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 195-201, illus., 1968.

267-049 **Babakhodzhayev, S. M.** Ob absolyutnom vozraste intruziva porfirovidnykh biotitovykh granitov (Vostochnyy Karamazar) [On the absolute age of the porphyritic biotite granite intrusives (Eastern Karamazar)]: Akad. Nauk Tadzhik SSR Doklady, v. 11, no. 1, p. 56-58, table, 1968.

269-280 **Babayan, G. D.** Osobennosti glubinnogo stroyeniya vostochnoy chasti Sibirskoy platformy po dannym geofizicheskikh issledovaniy [Features of the deep structure o the eastern part of the Siberian platform according to data of geophysical investigations (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklad Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki Moscow, Izdatel'stvo "Nauka," p. 192-196, illus., 1968.

Babayan, G. D. *See* Makarov, K. K. 275-172

Babayan, G. D. *See* Savinskiy, K. A. 275-176

Babich, G. N. *See* Babich, V. M. 266-200

266-200 **Babich, V. M.; Babich, G. N.; Fomina, N. A.** O raschete voln Lyava s ispolzovaniyem asimptoticheskikh formul metoda VKB [On the calculation of Lov waves using the asymptotic formulas of the VKB method], *in* Nekotoryye pryamyye obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'nay Seysmologiya, no. 4, p. 207-225, tables, 1968.

270-211 **Babin, C.; Didier, J.** Apport de la gravimétrie à la connaissance de la fosse centrale Armoricaine [Application of gravimetry to knowledge of the central Armoricain depression], *in* Contribution de la carte gravimétrique à la géologie du Mass Armoricain: [France] Bur. Recherches Géol. et Minières Mém., no. 52, p. 69-7 1967.

274-456 **Babin, C.; Didier, J.; Moign, A.; Plusquellec, Y.** Goulet et Rade de Brest—Essa de geologie sous-marine [The port entrance and road of Brest—Analysis of submarine geology (with English abs.)]: Rev. Géographie Phys. et Géologie Dynam ser. 2, v. 11, no. 1, p. 55-64, illus., table, 1969.

264-174 **Babu Rao, V.; Viswasundara,Rao; Jagannadha Sarma, V. V.; Bhaskara Rao, V** Electrical resistivity survey for water in the N.G.R.I. site, *in* Problems in geophysic relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysic Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad India, Natl. Geophys. Research Inst., p. 77-92, illus., table, 1966.

267-402 **Babu, Rao, V.; Sastry, T. S.; Srivastava, B. J.** Dependence of declination-chang of geomagnetic storm sudden commencement on local time and season: Jour. Atmos and Terrest. Physics, v. 30, no. 10, p. 1809-1815, illus., table, 1968.

Babu, V. R. R. M. *See* Venkata Reddy, K. 265-597

275-251 **Babu, V. R. R. M.** Temperatures of formation of pegmatites of Nellore mica-bel Andhra Pradesh, India: Econ. Geology, v. 64, no. 1, p. 66-71, illus., tables, 1969.

265-196 **Babuška, Vladislav.** Elastic anisotropy of igneous and metamorphic rock Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. 3, p. 291-30 illus., table, 1968.

Babuška, Vladislav. *See* Klima, Karel. 272-154

Babuška, Vladislav. *See* Pros, Zdenek. 274-158

275-437 **Bachan, W.** Geoelektromos korrelaćioś vizsgálatok lenggelországi mélyfurasokban [Geoelectrical correlation investigations in Polish deep drill holes (with Russia and German summ.)]: Magyar Geofizika, v. 10, no. 1, p. 39, 1969.

Bachin, A. P. *See* Anan'yeva, Ye. M. 267-202

70-145 **Bachmanov, N. A.; Ryabinov, M. N.** Otsenka nadezhnosti apparatury [Estimation of the reliability of apparatus]: Geofiz. Apparatura, no. 35, p. 168-172, illus., 1968.

67-320 **Backus, Freeman; Gilbert, Freeman.** The resolving power of gross Earth data: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 169-205, illus., 1968.

70-261 **Backus, G. E.** Kinematics of geomagnetic secular variation in a perfectly conducting core: Royal Soc. London Philos. Trans., ser. A, v. 263, no. 1141, p. 239-266, illus., 1968.

75-101 **Backus, George; Gilbert, Freeman.** Constructing P-velocity models to fit restricted sets of travel-time data: Seismol. Soc. America Bull., v. 59, no. 3, p. 1407-1414, illus., table, 1969.

6-575 **Badalov, G. I.** Utochneniye kriteriyev nasyshcheniya produktivnykh plastov devona Romashkinskogo neftyanogo mestorozhdeniya [Precising the criteria for saturation of the Devonian producing formations of the Romashkino oil field]: Vyssh. Ucheb. Zavedeniy Izv., Neft' i Gaz, no. 5, p. 10-12, 1968.

75-284 **Badalov, S. T.; Vinogradov, V. I.** K voprosu ob istochnikakh sery v endogennykh mestorozhdeniyakh Severo-Zapadno Karamazara [On the problem of the sources of the sulfur in the endogene deposits of Northwestern Karamazar], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 72-83, illus., tables, 1967.

4-193 **Badalyan, S. V.; Vantsyan, G. M.; Gazaryan, G. O.** O geofizicheskikh poiskakh glubokozalegayushchikh rudnykh tel na kolchedannykh mestorozhdeniyakh Armenii [On geophysical prospecting for deep-seated ore bodies in the pyrite deposits of Armenia]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 20, nos. 5-6, p. 96-103, illus., 1967.

5-253 **Badalyan, S. V.** Rezul'taty ispytaniya "Ertsprospektor" na Akhtal'skom polimetallicheskom mestorozhdenii [Results of testing the "Erzprospektor" on the Akhtal polymetallic deposit]: Geofiz. Apparatura, no. 27, p. 19-22, illus., 1966.

0-129 **Badalyan, S. V.** Die elektrische Erkundung in Erzbergwerken mit Hilfe der Methode der induzierten Polarisation [Electrical investigation in ore mines with the aid of the induced polarization method]: Freiberger Forschungshefte, C 226, p. 127-135, illus., table, 1967.

5-161 **Badalyan, S. V.** Opyt primeneniya podzemnogo varianta metoda vyzvannoy polyarizatsii na Akhtal'skom mestorozhdenii [Attempt to use the underground variant of the induced polarization method on the Akhtal deposit]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, no. 5, p. 65-68, illus., 1965.

7-248 **Badekas, John; Bueller, Ivan I.** Interpolation of the vertical deflection from horizontal gravity gradients: Jour. Geophys. Research, v. 73, no. 22, p. 6869-6878, illus., tables, 1968.

Badelyan, S. V. *See* Arutyunyan, G. V. 274-189

3-239 **Baer, A. J.; Norris, D. K.** (editors). Research in tectonics—Workshop, Ottawa, 1968: Canada Geol. Survey Paper 68-52, 373 p., illus., tables, 1969.

Baerreis, David A. *See* Bender, Margaret M. 265-032

Baerreis, David A. *See* Bender, Margaret M. 271-019

1-568 **Bagautdinov, A. K.; Koval'chuk, F. S.; Musin, M. Kh.** Opyt vydeleniye effektivnykh neftenasyshchennykh moshchnostey na primere produktivnogo gorizonta A-1 Sosinsko-Sovetskogo mestorozhdeniya Tomskoy oblasti [Attempt to bring out effective oil-saturated thicknesses, illustrated by producing horizon A-1 in the Sosin-Sovet field of the Tomsk district]: Neftegazovaya Geologiya i Geofizika, no. 11, p. 7-10, illus., 1968.

273-098 **Bagby, John P.** Terrestrial satellites—Some direct and indirect evidence: Icarus, v. 10, no. 1, p. 1-10, illus., 1969.

Bagdasarova, A. M. *See* Tokarev, P. I. 265-175

267-037 **Bagdasaryan, G. P.; Danilovich, L. G.** Novyye dannyye ob absolyutnom vozraste vulkanicheskikh obrazovaniy Zakarpat'ya [New data on the absolute age of the volcanic formations of Transcarpathia]: Akad. Nauk SSSR Izv. Ser. Geol., no. 9, p. 15-23, tables, 1968.

266-476 **Bagina, O. L.** Otsenka prirody yestestvennoy ostatochnoy namagnichennosti po koeffitsiyentu pereosazhdeniya [Estimation of the nature of natural remanent magnetization from the redeposition coefficient]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 99-103, table, 1968.

267-047 **Bagirbekova, O. D.** Absolyutnyy vozrast Zurnabadskogo granitoidnogo intruziva (Malyy Kavkaz) [Absolute age of the Zurnabad granitoid intrusive (Lesser Caucasus)], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 17, 1967.

Bagley, M. *See* Miller, D. K. 265-045

268-269 **Bagot, C. H.; Risely, B. G.** The Eden-Burnside fault zone—Geophysical survey: South Australia Dept. Mines Mining Rev., 1966, no. 124, p. 93-96, illus., 1968.

268-280 **Bagramyants, V. O.; Budanov, V. G.; Strizhov, V. I.** Vliyaniye vibratsiy na pokazaniya morskogo gravimetra [Effect of vibrations on the readings of a marine gravimeter]: Prikladnaya Geofizika, no. 53, p. 108-111, illus., 1968.

Bagramyants, V. O. *See* Veselov, K. Ye. 271-272

267-634 **Bagrintsev, M. I.** Termostabilizatsiya nulevogo urovnya modulyatora na tranzistorakh v apparature induktsionnogo karotazha [Thermal stabilization of the zero level of the modulator on transistors in induction logging apparatus]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 8, p. 110-114, illus., 1968.

268-642 **Bagrintsev, M. I.** Trekhkanal'naya telemetricheskaya sistema na kabele KTB [Three-channel telemetering system of KTB cable]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 10, p. 126-132, illus., 1968.

274-141 **Bahjat, Dhari S.; Kisslinger, Carl.** Model study of radiation from an explosion in a circular disk: Geophysics, v. 34, no. 2, p. 213-221, illus., 1969.

271-128 **Bailey, J. T.; Evans, S.** Radio echo-sounding on the Brunt Ice Shelf and in Coats Land, 1965: British Antarctic Survey Bull., no. 17, p. 1-12, illus., 1968.

Bailey, Roy A. *See* Smith, Robert L. 270-442

Bailey, Roy A. *See* Doell, Richard R. 271-364

Baillard, Noëlle, *See* Tobailem, Jacques. 266-055

Bainbridge, A. E. *See* Dockins, K. O. 269-033

272-545 **Baird, D. E.** Evaluation of Middle East reservoirs with complex lithology, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. U1-U27, illus., tables, 1968.

273-503 **Baird, D. E.** Evaluation of Middle East reservoirs with complex lithology: Log Analyst, v. 10, no. 2, p. 18-32, illus., tables, 1969.

Baird, J. G. *See* Seigel, H. O. 265-269

50 **Baker, C. H., Jr.** Thermal springs near Midway, Utah, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D63-D70, illus., table, 1968.

35 **Baker, George.** Six well-preserved australites from the Port Campbell—Princeton region, Western Australia: Meteoritics, v. 4, no. 1, p. 43-56, illus., tables, 1968.

51 **Baker, P. E.** Comparative volcanology and petrology of the Atlantic island arcs: Bull. Volcanol., v. 32, no. 1, p. 189-206, illus., tables, 1968.

72 **Bakharevskaya, T. M.** O vydelenii tonkikh plastov v krovle paleozoyskikh otlozheniy Saratovskogo Povolzh'ya po dannym obmennykh otrazhennykh voln PS [On the detection of thin layers in the top of the Paleozoic formations in the Saratov area along the Volga according to data of converted reflected waves, PS], *in* Poperechnyye i obmennyye volny v seysmorazvedke: Moscow, Vses. Nauchno-Issled. Inst. Geofiz. Metodov Razvedki and Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologii i Geofiziki, p. 210-218, illus., tables, 1967.

Bakhterev, V. V. *See* Sen'ko-Bulatnyy, I. N. 268-649

Bakhterev, V. V. *See* Sen'ko-Bulatnyy, I. N. 269-711

78 **Baklanov, N. I.; Baklanova, V. V.** O fizicheskikh svoystvakh gornykh porod Krivorozh'ya [On the physical properties of rocks of the Krivoy Rog (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 78-85, illus., tables, 1968.

Baklanov, N. I. *See* Golizdra, G. Ya. 275-239

Baklanova, V. V. *See* Baklanov, N. I. 270-278

59 **Bakshi, Sachindra Kumar.** Magneto-elastic torsional vibration of a visco-elastic cylinder: Gerlands Beitr. Geophysik, v. 77, no. 6, p. 453-461, 1968.

Bakzhanov, G. R. *See* Morozov, M. D. 275-182

24 **Balaganskiy, P. A.** Issledovaniye vliyaniya vzryvnykh rabot na ustoychivost' gornykh vyrabotok [Investigation of the effect of blasting operations on the stability of rock excavations], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 79-88, illus., table, 1967.

74 **Balakay, A. N.** Tipy geofizicheskikh anomaliy Priimandrovskogo zhelezorudnogo rayona (Kol'skiy poluostroy [Types of geophysical anomalies of the Imandra iron ore region (Kola Peninsula)], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 45-49, illus., tables, 1968.

76 **Balakay, A. N.** O metodike geofizicheskogo kartirovaniya zhelezorudnoy formatsii Priimandrovskogo rayona (Kol'skiy poluostrov) [On the procedure of geophysical mapping of the iron ore formations of the Imandra region (Kola Peninsula)], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 43-44, 1968.

53 **Balakhin, G. D.** Geologicheskoye kartirovaniye metodom induktsii v Zapadnoy Yakutii [Geological mapping by the induction method in Western Yakutia (with English summ., p. 162)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 83-91, illus., 1968.

16 **Balakina, L. M.; Vvedenskaya, A. V.; Misharina, L. A.; Shirokova, Ye. I.** Issledovaniye napryazheniy v ochagakh zemletryaseniy [Investigation of stresses at earthquake focuses]: Akad. Nauk SSSR Vestnik, no. 1, p. 64-70, illus., table, 1968.

271-091 **Balakina, L. M.; Kislovskaya, V. V.; Kuznetsova, K. I.** III Vsesoyuznyy simpo um po seysmicheskomu rezhimu [The Third All-Union Symposium on the Seism Regime]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 110-113, 1968.

275-108 **Balakina, L. M.; Misharina, L. A.; Shirokova, E. I.; Vvedenskaya, A. V.** T stress state in earthquake foci and the elastic stress field of the Earth [with Fren abs.], *in* A symposium on processes in the focal region—Internat. Union Geode and Geophysics, 14th Gen. Assembly, Zurich, 1967: Dominion Observatory Otta Pubs., v. 37, no. 7, p. 194-198, illus., table, 1969.

264-160 **Balakrishna, S.; Ramana, Y. V.** Variation of attenuation of sound with frequen in rocks, *in* Problems in geophysics relating to the crust of the Earth—Indian Na Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 19 Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 1 151, illus., tables, 1966.

265-198 **Balakrishna, S.; Ramana, Y. V.; Satyanarayana Rao, M. V.** Shear wave velocit in Indian rocks: [India] Natl. Geophys. Research Inst. Bull., v. 6, no. 1, p. 1-16, ill tables, 1968.

268-152 **Balakrishna, S.; Ramana, Y. V.** Integrated studies of the elastic properties some Indian rocks, *in* The crust and upper mantle of the Pacific area—Intern Upper Mantle Project Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NA NRC Pub. 1687), p. 489-500, illus., tables, 1968.

271-117 **Balakrishna, S.; Ramana, Y. V.** Laboratory and field velocity measurements granites: Indian Geophys. Union Jour., v. 4, nos. 3-4, p. 147-157, illus., tables, 196

273-144 **Balakrishna, S.; Ramana, Y. V.** Ultrasonic velocity studies in some rocks un uniform loading: [India] Natl. Geophys. Research Inst. Bull., v. 6, no. 2, p. 87-89 lus., 1968.

271-209 **Balasanyan, S. I.** Peculiarities of magmatic phenomena in connection with tonic development of the orogenic belt, *in* Internat. Geol. Cong., 23d, Prague, 19 Proc., Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 73-79, 1968; a (in Russian) *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geolog Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 115-116, 196

271-066 **Balasundaram, M. S.** The Koyna earthquake: Indian Geophys. Union Jour., v no. 1, p. 21-27, 1968.

265-272 **Balavadze, B. K.** (and others). Tektonika oblasti Chernogo i Azovskogo mo [Tectonics of the region of the Black Sea and Sea of Azov (with English summ Geotektonika, no. 4, p. 70-84, illus., 1968.

266-353 **Balavadze, B. K.; Abashidze, V. G.** Tbilisskiy gravimetricheskiy bazis etalonirovaniya gravimetrov [The Tbilisi gravimetric base for calibrating gravi ters]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 148-151, tab 1966.

266-354 **Balavadze, B. K.; Shengelaya, G. Sh.; Kartvelishvili, K. M.; Mindeli, P.** Rezul'taty opredeleniya srednikh plotnostey gornykh massivov gravimetriches metodom na territorii Bol'shogo Kavkaza [Results of the determination of mean sities of mountain massifs by the gravimetric method in the territory of the Gre Caucasus]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 152- illus., tables, 1966.

268-347 **Balavadze, B. K.; Shengelaya, G. Sh.** O plotnosti "bazal'tovogo" sloya zem kory [On the density of the "basaltic" layer of the Earth's crust], *in* Simpozium fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy k Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 83-87, table, 1968.

73-275 **Balavadze, B. K.; Abashidze, V. G.; Mumladze, G. V.** K izucheniyu lokal'nykh deformatsiy zemnoy kory naklonomernym metodom [On the study of local crustal deformations by a tiltmeter method]: Akad. Nauk Gruzin. SSR Soobshch., v. 52, no. 1, p. 51-55, illus., table, 1968.

Balavadze, B. K. *See* Lebedev, T. S. 275-194

6-063 **Baldwin, Ralph B.** Comments on letter by G. Steinberg, "Inapplicability of Baldwin's relation for determining the causes of formation of lunar craters" [1968]: Jour. Geophys. Research, v. 73, no. 18, p. 6133-6135, illus., 1968.

8-050 **Baldwin, Ralph B.** Lunar mascons—Another interpretation: Science, v. 162, no. 3860, p. 1407-1408, 1968.

9-120 **Baldwin, Ralph B.** A determination of the elastic limit of the outer layer of the Moon: Icarus, v. 9, no. 3, p. 401-404, illus., 1968.

4-064 **Baldwin, Ralph B.** Ancient giant craters and the age of the lunar surface: Astron. Jour., v. 74, no. 4, p. 570-571, 1969.

Bales, William E. *See* Emilia, David A. 264-419

0-448 **Balesta, S. T.; Farberov, A. I.** Seismic studies of Piip crater breakthrough: Bull. Volcanol., v. 32, no. 2, p. 395-399, illus., 1968.

0-180 **Ball, Ian R.; Fernando, C. H.** Freshwater triclads (Platyhelminthes turbellaria) and continental drift: Nature, v. 221, no. 5186, p. 1143-1144, illus., 1969.

Ball, M. *See* Lidz, L. 272-494

4-236 **Ball, M. M.; Harrison, C. G. A.; Supko, P. R.** Atlantic opening and the origin of the Caribbean: Nature, v. 223, no. 5202, p. 167-168, illus., 1969.

Ball, Mahlon M. *See* Lidz, Louis. 273-489

Ball, R. H. *See* Kahle, Anne B. 274-319

5-257 **Ball, R. H.; Kahle, Anne B.; Vestine, E. H.** Determination of surface motions of the Earth's core: Jour. Geophys. Research, v. 74, no. 14, p. 3659-3680, illus., tables, 1969.

1-548 **Ballan, Y.; Klingebiel, A.; Pujos, M.; Resseguier, A. de.** Contribution à l'étude du canyon "Gascogne 1" [Contribution to the study of "Gascony 1" canyon: Inst. Geologie Bassin d'Aquitaine Bull., no. 5, p. 168-173, illus., table, 1968.

4-263 **Ballarin, Silvio.** Valutazione della deflessione che subisce la verticale a causa delle masse topografiche e delle sottostanti masse compensanti ritenute presenti dalle ipotesi isostatiche [Evaluation of the deflection of the vertical due to topographic masses and underlying compensating masses present according to isostatic hypotheses (with English and French summ.)]: Boll. Geodesia e Sci. Affini, v. 28, no. 1, p. 1-32, illus., tables, 1969.

5-314 **Ballario, M. C.** On the special events of March 1966—Correlation between solar and terrestrial phenomena [with French abs.]: Annales Géophysique, v. 25, no. 1, p. 135-146, illus., table, 1969.

2-302 **Ballif, J. R.; Jones, D. E.** Further evidence on the correlation between transverse fluctuations in the interplanetary magnetic field and Kp: Jour. Geophys. Research, v. 74, no. 9, p. 2289-2301, illus., 1969.

4-310 **Ballif, J. R.; Jones, D. E.** Flares, Forbush decreases, and geomagnetic storms: Jour. Geophys. Research, v. 74, no. 14, p. 3499-3511, illus., table, 1969.

274-311 **Ballif, J. R.; Jones, D. E.** Morphology of a solar-terrestrial event in March 196 Jour. Geophys. Research, v. 74, no. 14, p. 3512-3516, illus., 1969.

264-099 **Ballón M., Alfonso.** Movimientos sísmicos ocurridos en Urcos y alrededores los meses de Mayo y Junio de 1965 (Provincia de Urcos, departamento del Cuzc [Seismic movements occurring in Urcos and vicinity in May and June, 196 (Province of Urcos, department of Cuzco)]: [Peru] Com. Carta Geol. Nac. Bol., n 13, p. 237-246, illus., 1966.

267-054 **Balsiger, H.; Geiss, J.; Groegler, N.; Wyttenbach, A.** Distribution and isotop abundance of lithium in stone meteorites: Earth and Planetary Sci. Letters, v. 5, n 1, p. 17-22, illus., tables, 1968.

Balugina, N. M. *See* Vedekhin, A. F. 270-521

270-345 **Balyasnyy, N. D.; Kogan, R. M.; Pegoyev, A. N.; Tenenbaum, I. M.; Trifonov, V.; Fridman, Sh. D.** Polevoy differentsial'nyy gamma-spektrometr [A field d ferential gamma-spectrometer]: Geofiz. Apparatura, no. 35, p. 49-52, illus., 1968.

Bame, S. J. *See* Montgomery, Michael D. 264-325

265-386 **Bame, S. J.; Asbridge, J. R.; Hundhausen, A. J.; Strong, I. B.** Solar wind and ma netosheath observations during the January 13-14, 1967, geomagnetic storm: Jo Geophys. Research, v. 73, no. 17, p. 5761-5767, illus., 1968.

Bame, S. J. *See* Asbridge, J. R. 265-388

272-333 **Bame, S. J.** Plasma sheet and adjacent regions, *in* Earth's particles and fields NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York a Amsterdam, Reinhold Book Corp., p. 373-383, illus., table, 1968.

Bame, S. J. *See* Hundhausen, A. J. 273-330

Banar, Z. Sh. *See* Babak, A. P. 269-710

Bando, S. *See* Hamaguchi, H. 273-045

275-328 **Banerjee, Subir K.** Origin of weak ferromagnetism and remanence in natu cassiterite crystals: Jour. Geophys. Research, v. 74, no. 15, p. 3789-3795, ill 1969.

269-180 **Banghar, A. R.; Sykes, Lynn R.** Focal mechanisms of earthquakes in the Ind Ocean and adjacent regions: Jour. Geophys. Research, v. 74, no. 2, p. 632-649, ill table, 1969.

271-545 **Banks, Norman G.; Richards, Michael L.** Structure and bathymetry of west end of Bartlett Trough, Caribbean Sea, *in* Tectonic relations of northern Cen America and the western Caribbean: Am. Assoc. Petroleum Geologists Mem. 11 221-228, illus., 1969.

272-011 **Banks, P. O.; Rebello, D. P.** Zircon age of a Precambrian rhyolite, northeast Wisconsin: Geol. Soc. America Bull., v. 80, no. 5, p. 907-910, illus., tables, 1969.

Banks, Philip O. *See* Gomberg, David N. 265-005

272-013 **Banks, Philip O.; Cain, J. Allen.** Zircon ages of Precambrian granitic roc northeastern Wisconsin: Jour. Geology, v. 77, no. 2, p. 208-220, illus., tables, 196

270-097 **Bannister, Peter R.** Determination of the electrical conductivity of the sea be shallow waters: Geophysics, v. 33, no. 6, p. 995-1003, illus., 1968.

267-300 **Banwell, C. J.** Programming of temperature surveys, *in* Waiotapu geother field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 75-86, illus., 196

67-356 **Banwell, C. J.** Oxygen and hydrogen isotopes in New Zealand thermal areas, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 95-138, illus. [1967].

66-429 **Baral, M. C.** Hydromagnetic flow due to a transient plane: Pure and Appl. Geophysics, v. 70, no. 2, p. 149-155, 1968.

Baranov, B. V. *See* Ovchinnikov, L. N. 265-049

75-353 **Baranov, G. M.; Smyslov, A. A.; Fedorov, A. A.** Metodika oprobovaniya gornykh porod i polevyye gamma-spektrometricheskiye izmereniya [A procedure for assaying rocks and field gamma-spectrometric measurements], *in* Osnovnyye printsipy i metodika radiokhimicheskogo kartirovaniya gornykh porod: Vses. Nauchno-Issled. Geol. Inst. Trudy, n. ser., v. 164, p. 33-53, illus., tables, 1968.

75-355 **Baranov, V. I.; Khristianova, L. A.** Radioaktivnost' okeanicheskikh otlozheniy [Radioactivity of marine sediments], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 401-408, illus., tables, 1963.

5-424 **Baranskiy, L. N.; Geller, L. A.; Kazak, B. N.** O skorosti rasprostraneniya korotkoperiodnykh kolebaniy elektromagnitnogo polya Zemli tipa Pc-1 ("zhemchuzhiny") [On the velocity of propagation of short-period vibrations of the electromagnetic field of the Earth of Pc-1 type ("pearls")]: Akad. Nauk SSSR Doklady, v. 177, no. 1, p. 85-87, illus., 1967.

Baranskiy, L. N. *See* Troitskaya, V. A. 271-349

5-324 **Baranskiy, L. N.** Eksperimental'noye izucheniye volnovodnogo rasprostraneniya kolebaniy elektromagnitnogo polya Zemli tipa PC 1 [Experimental study of the wave-guide propagation of type PC 1 pulsations of the electromagnetic field of the Earth]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 40-49, illus., table, 1969.

2-101 **Barazangi, Muawia; Dorman, James.** World seismicity maps compiled from ESSA, Coast and Geodetic Survey, epicenter data, 1961-1967: Seismol. Soc. America Bull., v. 59, no. 1, p. 369-380, illus., 1969.

5-403 **Barcus, James R.** Electron precipitation following a geomagnetic storm sudden commencement [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 533-539, illus., 1968.

4-490 **Bardon, Charles; Pied, Bernard.** Formation water saturation in shaly sands, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. Z1-Z19, illus., tables, 1969.

Bardossi, Fulvio. *See* Herbert, Don. 267-615

Barfield, J. N. *See* Cummings, W. D. 267-378

Barker, Fred. *See* Bickford, M. E. 271-001

5-270 **Barker, Fred; Friedman, Irving.** Carbon isotopes in pelites of the Precambrian Uncompahgre Formation, Needle Mountains, Colorado: Geol. Soc. America Bull., v. 80, no. 7, p. 1403-1407, illus., table, 1969.

8-017 **Barker, Harold; Burleigh, Richard; Meeks, Nigel.** New method for the combustion of samples for radiocarbon dating: Nature, v. 221, no. 5175, p. 49-50, illus., 1969.

4-489 **Barlai, Zoltán.** Well logging parameters of hydrocarbon-bearing sandstones composed of sand, silt and shale; evaluation of water saturation, porosity and grain-size distribution, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. X1-X42, illus., table, 1969.

Barlier, F. *See* Kovalevsky, J. 271-166

Barnes, I. Lynus. *See* Finlayson, J. Bruce. 268-614

269-107 **Barnes, Virgil E.** Petrography of new tektite localities in Thailand and the Philip pines, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects Prague, Academia, p. 27-36, illus., tables, 1968.

270-182 **Barnett, C. H.** Oceanic rises in relation to the expanding Earth: Nature, v. 22 no. 5185, p. 1043-1044, illus., 1969.

264-415 **Barrett, D. L.** Frequency modulation of a shipborne proton magnetometer signa due to the hydrodynamic instability of the towed vehicle: Jour. Geophys. Research v. 73, no. 16, p. 5327-5334, illus., 1968.

273-105 **Barricelli, Nils Aall; Metcalfe, Ralph.** The lunar surface and early history of th Earth's satellite system: Icarus, v. 10, no. 1, p. 144-163, illus., 1969.

270-106 **Barringer, A. R.; McNeill, J. D.** Radiophase—A new system of conductivit mapping, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: An Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 157-167, illus., tables, 1968.

264-052 **Barringer, Richard W.** World's meteorite craters ("Astroblemes")—Versio VII, February 1967: Meteoritics, v. 3, no. 3, p. 151-157, tables, 1967.

Barron, K. *See* Norris, D. K. 273-246

Barsczus, Hans G. *See* Orr, David. 272-325

Barsuk, A. M. *See* Arakelyants, M. M. 272-034

265-160 **Barsukov, O. M.** Izmeneniye ρ_k vo vremeni—vozmozhnyy kriteriy prognoze ze letryaseniya [Temporal changes in ρ_k—A possible criterion for earthquake predi tion]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 86-88, illus., 1968.

267-432 **Barsukov, O. M.; Bezuglaya, L. S.; Vadkovskiy, V. N.; Skovorodkin, Yu. P.** prirode odnoy iz anomaliy vekovogo khoda magnitnogo polya Zemli [On the natu of one of the anomalies of the secular course of the magnetic field of the Earth Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 85-87, illus., 1968.

275-347 **Barsukov, O. M.; Skovorodkin, Yu. P.** Magnitnyye nablyudeniya v rayone vzry v Medeo [Magnetic observations in the region of explosions in the Medeo]: Aka Nauk SSSR Izv. Fizika Zemli, no. 5, p. 68-69, illus., table, 1969.

274-374 Barta, György. Magnetic and telluric research in Hungary, 1963-1966: Ac Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 51-61, 1967.

Bartlett, J. T. *See* Readings, C. J. 268-250

Barton, Jackson M., Jr. *See* Doig, Ronald. 272-020

265-294 **Bartz, J.** Recent movements in the Upper Rhinegraben, between Rastatt a Mannheim, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, ed tors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upp Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mem., n 26), p. 1-2, illus., 1967.

Basham, P. W. *See* Ellis, R. M. 267-310

271-057 **Basham, P. W.** Canadian magnitudes of earthquakes and nuclear explosions south-western North America: Royal Astron. Soc. Geophys. Jour., v. 17, no. 1, p. 13, illus., tables, 1969.

274-078 **Basham, P. W.; Ellis, R. M.** The composition of P codas using magnetic tape seismograms: Seismol. Soc. America Bull., v. 59, no. 2, p. 473-486, illus., tables, 1969.

Basin, Ya. N. *See* Kukharenko, N. K. 272-566

274-003 **Baskerville, Charles A.** Geology and foundation treatment of sensitive sediments—World's Fair highway complex, New York: Geol. Soc. America Eng. Geology Case Histories, no. 6, p. 55-63, illus., 1968.

272-036 **Baskina, V. A.; Favorskaya, M. A.** Vozrast izverzhennykh porod Imanskogo bloka (Vostochnyy Sikhote-Alin'), opredelennyy K-Ar—Metodom [Age of the igneous rocks of the Iman block (Eastern Sikhote-Alin) determined by the K-Ar method]: Akad. Nauk SSSR Doklady, v. 184, no. 4, p. 905-908, illus., table, 1969.

272-008 **Bass, Manuel N.; Ferrara, Giorgio.** Age of adularia and metamorphism, Ouachita Mountains, Arkansas: Am. Jour. Sci., v. 267, no, 4, p. 491-498, tables, 1969.

272-014 **Bass, Manuel N.** Petrography and ages of crystalline basement rocks in Florida—Some extrapolations, *in* Other papers on Florida and British Honduras: Am. Assoc. Petroleum Geologists Mem. 11, p. 283-310, illus., tables, 1969.

Bassett, William A. *See* Mao, Ho-Kwang. 270-239

Bassinger, B. G. *See* Lattimore, Robert K. 265-455

271-376 **Bassinger, B. G.; DeWald, O. E.; Peter, G.** Interpretation of the magnetic anomalies off central California: Jour. Geophys. Research, v. 74, no. 6, p. 1484-1487, illus., 1969.

Basson, H. H. *See* Schreiner, G. D. L. 269-016

267-377 **Basu, S.; DasGupta, A.** Latitude variation of electron content in equatorial region under magnetically quiet and active conditions: Jour. Geophys. Research, v. 73, no. 17, p. 5599-5602, illus., table, 1968.

264-219 **Bateman, Paul C.** Geologic structure and history of the Sierra Nevada, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 121-131, illus., 1968.

Bates, Patricia. *See* Arthur, D. W. G. 269-135

Bath, Gordon D. *See* Noble, Donald C. 264-392

271-363 **Bath, Gordon D.** Aeromagnetic anomalies related to remanent magnetism in volcanic rock, Nevada Test Site, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 135-146, illus., table, 1968.

265-119 **Båth, Markus; Stefánsson, R.** S-P conversion at the base of the crust: Annali Geofisica, v. 19, no. 2, p. 119-130, illus., tables, 1968.

267-564 **Båth, Markus.** Underground measurements of short-period seismic noise: Annali Geofisica, v. 19, no. 1, p. 107-117, illus., tables, 1966.

273-120 **Båth, Markus.** Mathematical aspects of seismology: Amsterdam and New York, Elsevier Publishing Co. (Developments in Solid Earth Geophysics, no. 4), 415 p., illus., 1968.

Batson, R. M. *See* Shoemaker, E. M. 268-078

Batson, R. M. *See* Shoemaker, E. M. 275-071

Batterson, S. A. *See* Choate, R. 268-079

268-251 **Bauer, A.; Baussart, M.; Carbonnell, M.; Kasser, P.; Perroud, P.; Renaud, A.** Missions aeriennes de reconnaissance au Groenland, 1957-1958—Observations aériennes et terrestres, exploitation des photographies aériennes, determination des vitesses des glaciers vêlant dans Disko Bugt et Umanak Fjord [Aerial reconnaissance missions in Greenland, 1957-58—Aerial and ground observations, use of airphotos, determination of velocities of glaciers calving into Disko Bugt and Umanak Fjord (with English abs.)]: Medd. om Grönland, v. 173, no. 3, 116 p., illus., tables, 1968.

268-253 **Bauer, A.** Exploitation des couvertures photographiques aériennes répétees du front des glaciers vêlant dans Disko Bugt et Umanak Fjord, Juin-Juillet 1964—[Pt.] 2, Accélération de l'écoulement des glaciers groenlandais vers leur front et détermination de leur débit solide [Use of repeated airphoto coverage of the front of glaciers calving into Disko Bugt and Umanak Fjord, June-July 1964—[Pt.] 2, Acceleration of flow of Greenland glaciers toward their front and determination of their solid discharge (with English abs.)]: Medd. om Grönland, v. 173, no. 5, p. 55-78, illus., tables, 1968.

268-254 **Bauer, A.** Mouvement et variation d'altitude de la zone d'ablation ouest (latitude moyenne 69°40′ N.) de l'indlandsis du Groenland entre 1948 et 1959 [Movement and variation of altitude of the zone of ablation west (average latitude 69°40′ N.) of the inland ice of Greenland between 1948 and 1959 (with English abs.)]: Medd. om Grönland, v. 174, no. 1, 79 p., illus., tables, 1968.

265-392 **Bauer, S. J.; Krishnamurthy, B. V.** Behavior of the topside ionosphere during a great magnetic storm: Planetary and Space Sci., v. 16, no. 5, p. 653-663, illus., 1968.

Bauman, A. J. *See* Horowitz, N. H. 274-049

Baumann, Dieter. *See* Udias, Agustin. 274-080

272-265 **Baumann, Ludwig; Olszak, Gerd; Tischendorf, Gerhard.** Tiefenbau der Erdkruste und endogene Gesteins- und Erzbildung [Deep structure of the Earth's crust and endogenic rock and ore formation]: Deutsch. Gesell. Geol. Wiss. Ber., ser. A, v. 13, no. 4, p. 439-460, 1968.

Baussart, M. *See* Bauer, A. 268-251

Baxter, M. S. *See* Walton, A. 267-020

271-006 **Baxter, M. S.; Ergin, M.; Walton, A.** Glasgow University radiocarbon measurements I: Radiocarbon, v. 11, no. 1, p. 43-52, 1969.

268-590 **Baydyuk, B. V.; Shreyner, L. A.** Issledovaniye deformatsionnykh svoystv razlichnykh osadochnykh porod v usloviyakh sovmestnogo vliyaniya vsestoronnego szhatiya i temperatury [Investigation of the deformational properties of various sedimentary rocks under conditions of the joint effect of confining pressure and temperature], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 36-45, illus., 1968.

Bayhi, J. F. *See* Levin, F. K. 264-198

Bayrock, L. A. *See* Folinsbee, R. E. 274-037

Bayuk, Ye. I. *See* Afanas'yev, G. D. 268-156

Bayuk, Ye. I. *See* Volarovich, M. P. 268-159

Bayuk, Ye. I. *See* Zvyagintsev, L. I. 272-500

275-171 **Bazanov, E. A.; Zolotov, A. N.; Mandel'baum, M. M.; Samsonov, V. V.** Perspektivy neftegazonosnosti yuga Sibirskoy platformy i plan regional'nykh geologo-geofizicheskikh rabot na neft' i gaz na 1971-1980 gg. [Oil and gas prospects of the south of the Siberian platform and the plan of regional geological and geophysical operations on oil and gas for 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 9-13, 1969.

Bazhev, A. B. *See* Chizov, O. P. 264-241

Bazheva, V. Ya. *See* Chizov, O. P. 264-241

266-366 **Becher, Dieter; Meincke, Wilhelm.** Der Wärmefluss zwischen Harz und Prignitz [Heat flow between Harz and Prignitz (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 6, p. 291-297, illus., tables, 1968.

273-372 **Beck, Myrl E., Jr.; Lindsley, Nancy C.** Paleomagnetism of the Beaver Bay complex, Minnesota: Jour. Geophys. Research, v. 74, no. 8, p. 2002-2013, illus., tables, 1969.

Becker, A. *See* Slankis, J. A. 275-142

275-307 **Bednářová-Nováková, B.; Halenka, J.** A universal interpretation of the generation of geomagnetic storms using features of the solar corona: Planetary and Space Sci., v. 17, no. 5, p. 1039-1044, illus., 1969.

267-397 **Bednářová-Nováková, Bohumila; Halenka, Jaroslav.** New method of forecasting geomagnetic activity using features of the solar corona: Nature, v. 220, no. 5164, p. 250-251, table, 1968.

265-680 **Begautdinov, A. K.; Demushkin, Yu. I.; Musin, M. Kh.** Nekotoryye osobennosti stroyeniya i neftegazonosnost' produktivnogo gorizonta A_1 Nizhne-vartovskogo svoda [Some features of the structure and oil and gas possibilities of producing horizon A_1 of the Nizhne-Vartov arch]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 6-11, illus., 1968.

267-354 **Begemann, F.** The tritium content of hot springs in some geothermal areas, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 55-70, illus., tables [1967].

Begemann, Fred. *See* White, Donald E. 267-352

Behannon, K. W. *See* Taylor, Harold E. 267-381

268-041 **Behannon, Kenneth W.** Intrinsic magnetic properties of the lunar body: Jour. Geophys. Research, v. 73, no. 23, p. 7257-7268, illus., tables, 1968.

265-295 **Behnke, C.; Closs, H.; Dürbaum, H.** Remarks concerning the tectonics of the Upper Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 3-4, illus., 1967.

269-398 **Behrendt, J. C.; Bentley, C. R.** Magnetic and gravity maps of the Antarctic: Am. Geog. Soc. Antarctic Map Folio Series, Folio 9, 9 plates, scale 1:15,000,000, text, 1968.

Behrendt, J. C. *See* Tibbetts, B. L. 273-456

273-204 **Behrendt, John C.; Tibbetts, Benton L.; Bonini, William E.; Lavin, Peter M.** A geophysical study in Grand Teton National Park and vicinity, Teton County, Wyoming: U.S. Geol. Survey Prof. Paper 516-E, p. E1-E23, illus., tables, 1968.

275-227 **Behrendt, John C.; Popenoe, Peter; Mattick, Robert E.** A geophysical study of North Park and the surrounding ranges, Colorado: Geol. Soc. America Bull., v. 80, no. 8, p. 1523-1537, illus., 1969.

272-147 **Behrens, Jörn; Dresen, Lothar; Hinz, Eckart.** Modellseismische Untersuchungen der dynamischen Parameter von Kopfwellen und Reflexion im überkritischen Bereich [Model seismic investigations of the dynamic parameters of head waves and reflections in the supercritical region (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 1, p. 43-68, illus., table, 1969.

273-458 **Behrens, Jörn; Dresen, Lothar.** Eine Möglichkeit zur Laufzeitsbestimmung reflektierter Wellen im Bereich der kritischen Entfernung [A possibility for determining the traveltime of reflected waves in the vicinity of the critical distance (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 2, p. 175-189, illus., 1969.

Beiser, E. *See* Murthy, V. Rama. 267-350

270-369 **Bek, E.** Methode und Vorrichtung für die seismoakustische Registierung von Gesteinsimpulsen [Method and apparatus for the seismoacoustic recording of rock pulses]: Freiberger Forschungshefte, C 225, p. 69-85, illus., 1967.

Bekzhanov, G. R. *See* Yesenov, Sh. Ye. 269-272

275-183 **Bekzhanov, G. R.** Glubinnoye stroyeniye Alaygyr-Karagaylinskogo rudnogo rayona [Deep structure of the Alagyr-Karagayla ore district]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 6, p. 1-5, 1968.

Belanov, V. M. *See* Tyapkin, K. F. 269-274

264-566 **Belash, V. A.** O vozmozhnostyakh skvazhinnykh izmereniy metodam vyzvannoy polyarizatsii s azimutal'noy ustanovki [On the possibilities of borehole measurements by the induced polarization method with azimuthal setup]: Razved. Geofizika, no. 23, p. 44-50, illus., 1967.

265-267 **Belash, V. A.** Teoreticheskoye obosnovaniye beskontaktnogo sposoba opredeleniya elektricheskikh i magnitnykh svoystv obraztsov tsilindricheskoy formy [Theoretical basis of a noncontact method of determining the electrical and magnetic properties of samples of cylindrical shape]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 82-85, 1968.

266-229 **Belash, V. A.** O spade potentsialov vyzvannoy polyarizatsii vo vremeni [On the potential drop of induced polarization in time (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 113-118, illus., table, 1967.

272-303 **Belcher, J. W.; Davis, Leverett, Jr.; Smith, E. J.** Large-amplitude Alfven waves in the interplanetary medium—Mariner 5: Jour. Geophys. Research, v. 74, no. 9, p. 2302-2308, illus., 1969.

Belderson, R. H. *See* Stride, A. H. 270-355

273-488 **Belderson, R. H.; Stride, A. H.** The shape of submarine canyon heads revealed by Asdic: Deep-Sea Research, v. 16, no. 1, p. 103-104, illus., 1969.

268-168 **Belenitskaya, G. A.; Tyuremnov, V. A.** O svyazi uprugikh i magnitnykh svoystv gornykh porod s ikh napryazhennym sostoyaniyem [On the relationship of elastic and magnetic properties of rocks to their stress state], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 177-181, illus., tables, 1968.

Belen'kaya, B. N. *See* Van'yan, L. L. 264-378

265-354 **Beliayevsky, N. A.; Borisov, A. A.; Volvovsky, I. S.; Schukin, Yu. K.** Transcontinental crustal sections of the USSR and adjacent areas, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1067-1078, illus., tables, 1968.

Belikov, B. P. *See* Aleksandrov, K. S. 265-208

Belikov, B. P. *See* Afanas'yev, G. D. 268-156

264-247 **Bell Aerosystems Company.** Report on prototype gravity measuring system, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 189-194, tables, 1967.

268-223 **Bell, J. F.** The measurement of the distance between Ethiopia-Perim-South Arabia at Bab el Mandeb in 1965 January: Royal Astron. Soc. Geophys. Jour., v. 16, no. 3, p. 317-323, illus., table, 1968.

Bell, K. *See* Moorbath, S. 267-016

265-034 **Bell, Keith.** Age relations and provenance of the Dalradian Series of Scotland: Geol. Soc. America Bull., v. 79, no. 9, p. 1167-1193, illus., tables, 1968.

273-054 **Bell, Peter M.; Boyd, F. R.** Phase equilibrium data bearing on thepressure and temperature of shock metamorphism, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 43-50, illus., table, 1968.

Bella, F. *See* Alessio, M. 265-018

269-683 **Bellaiche, Gilbert.** Précisions apportées à la connaissance de la pente continentale et de la plaine abyssale à la suite de trois plongées en bathyscaphe "Archimede" [Data contributed to knowledge of the continental slope and the abyssal plain by the series of three dives in bathyscape "Archimedes" (with English abs.)]: Rev. Géographie Phys. et Géologie Dynam., ser. 2, v. 10, no. 2, p. 137-145, illus., 1968.

274-267 **Bellamy, C. J.; Lodwick, G. D.** The reduction of barometric networks and field gravity surveys: Survey Rev., v. 19, no. 147, p. 216-227, illus., 1968.

Bellavin, O. V. *See* Timofeyev, A. N. 267-279

Bellavin, O. V. *See* Aleynikov, A. L. 267-338

Bellavin, O. V. *See* Aleynikov, A. L. 268-247

268-271 **Bellavin, O. V.; Aleynikov, A. L.** Forma Konevsko-Karas'yevskogo granitnogo massiva i yego svyaz' s tektonicheskoy strukturoy rayona po gravimetricheskim dannym [Shape of the Konev-Karas'yev granite massif and its relationship to the tectonic structure of the region, from gravimetric data], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 39-46, illus., table, 1967.

268-272 **Bellavin, O. V.; Dudar', Yu. I.; Rapoport, M. S.** Nekotoryye rezul'taty kompleksnykh geologo-geofizicheskikh issledovaniy slozhnostroyennykh granitoidnykh massivov Shilovsko-Konevskoy gruppy [Some results of combined geological and geophysical investigations of the complex-structured granitoid massifs of the Shilov-Konev group], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 49-56, illus., table, 1967.

Bellavin, O. V. *See* Aleynikov, A. L. 268-350

Bellemo, S. *See* Morelli, C. 267-119

265-221 **Belluigi, Arnaldo.** Ancora qualche considerazione sul problema inverso della geoelettrica [Again some consideration on the inverse problem of geoelectrics (with English and German summ.)]: Annali Geofisica, v. 20, no. 1, p. 95-107, 1967.

273-386 **Belokon', V. I.; Kochegura, V. V.; Sholpo, L. Ye.** Predstavleniye protsessa vyazkogo namagnichivaniya v malom pole s ispol'zovaniyem skhemy Preyzakha-Neela [Representation of the process of viscous magnetization in a weak field using the Preisach-Neel scheme]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 63-68, illus., 1969.

268-373 **Belon, A. E.; Magges, J. E.; Davis, T. N.; Mather, K. B.; Glass, N. W.; Hughes, G. F.** Conjugacy of visual auroras during magnetically quiet periods: Jour. Geophys. Research, v. 74, no. 1, p. 1-28, illus., table, 1969.

270-095 **Belonosova, A. V.; Tadzhimukhamedova, S. S.; Alekseyev, A. S.** K raschetu godografov i geometricheskogo raskhozhdeniya luchey v neodnorodnykh sredakh [On the calculation of traveltime curves and the geometric divergence of rays in inhomogeneous mediums], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 124-136, illus., 1967.

270-096 **Belonosova, A. V.; Alekseyev, A. S.** Ob odnoy postanovke kinematicheskoy zadachi seysmiki dlya dvumernoy nepreryvno-neodnorodnoy sredy [On a formulation of the kinematic problem of seismic surveying for a two-dimensional continuously inhomogeneous medium], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 137-154, illus., 1967.

268-607 **Belousov, I. M.; Ioffe, A. I.; Smilga, V. P.** Vosstanovleniye rel'yefa morskogo dna v mestakh, ne obespechennykh promerom, s pomoshch'yu metoda naimen'shikh kvadratov [Reestablishment of the relief of the sea floor in places not provided by measurement, using the least squares method]: Akad. Nauk SSSR Doklady, v. 182, no. 1, p. 89-92, illus., 1968.

264-227 **Belousov, V. V.** O proiskhozhdenii okeanov [On the origin of the oceans]: Moskov. Obshch. Ispytateley Prirody Byull., Otdel Geol., no. 5, p. 18-39, illus., 1967.

265-349 **Belousov, V. V.; Kosminskaya, I. P.** Structure and development of transition zones between the continents and oceans, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1011-1026, illus., 1968.

267-329 **Belousov, V. V.** Sovremennyye predstavleniya o stroyenii i razvitii zemnoy kory i verkhney mantii materikov [Present concepts on the structure and evolution of the Earth's crust and upper mantle of the continents], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 3-20, illus., 1968.

268-224 **Belousov, V. V.** Some general aspects of development of the tectonosphere, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 9-17, 1968.

268-318 **Belousov, V. V.** Some problems of development of the Earth's crust and upper mantle of oceans, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 449-459, 1968.

269-309 **Belousov, V. V.** An open letter to J. Tuzo Wilson, *in* Debate about the Earth: Geotimes, v. 13, no. 10, p. 17-19, 1968.

272-190 **Belousov, V. V.** Problemes de la structure des profondeurs et l'évolution de la terre [Problems of the structure of the depths and the evolution the Earth], *in* Schweiz. Naturforsch. Gesell., Wiss. Teil, 147 Jahresversammlung, Schaffhausen 1967, Verh.: Zurich, Kommissionsverlag Berichthaus, p. 22-37, illus., 1967.

272-275 **Belousov, V. V.** Zemnaya kora i verkhnaya mantiya okeanov [The Earth's crust and upper mantle of the oceans (with English summ.)]: Akad. Nauk SSSR Mezhduvedomstv. Geofiz. Kom., Rezul'taty Issledovaniy po Mezhdunarodnym Geofiz. Proyektam, 255 p., illus., tables, 1968.

265-682 **Belousova, M. G.** K voprosu vydeleniya plastov s neglinistym tsementom po promyslovo-geofizicheskim dannym [On the problem of distinguishing formations with non-clay cement on the basis of geophysical logging data]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 32-34, illus., 1968.

267-478 **Belov, M. I.** Pervaya magnitnaya morskaya s"yemka vokrug Antarktidy [First marine magnetic survey around Antarctica], *in* Problemy polyarnoy geografii: Arktich. i Antarktich. Nauchno-Issled. Inst. Trudy, v. 285, p. 239-246, table, 1968.

72-484 **Belov, V. I.; Berzin, A. K.; Vitozhents, G. Ch.; Sulin, V. V.** Rezul'taty oprobovaniya gamma-aktivatsionnogo metoda opredeleniya soderzhaniya ugleroda i kisloroda v obraztsakh iskopayemykh ugley [Results of testing of the gamma-activation method of determining the hydrogen and oxygen content in coal samples], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 255-266, illus., tables, 1968.

70-245 **Belov, Yu. P.; Bol'shakov, B. Ye.** Sposob generalizatsii geofizicheskikh dannykh pri kachestvennom prognoze geologicheskikh kharakteristik zemnoy kory [A way of generalizing geophysical data in qualitative prediction of the geological characteristics of the Earth's crust (with English summ., p. 148)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 99-103, 1968.

73-301 **Belov, Yu. P.; Ivanov, S. S.; Ushakov, S. A.** K metodike vychisleniy ukloneniy otvesa na akvatorii s pomoshch'yu ETsVM [On a procedure for calculating plumb-line deflections on a water body using a computer], Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 145-153, illus., 1968.

73-303 **Belov, Yu. P.; Ivanov, S. S.; Isayev, Ye. N.; Ushakov, S. A.** Osnovnyye voprosy metodiki i nekotoryye rezul'taty izostaticheskogo redutsirovaniya s pomoshch'yu ETsVM [Main problems of procedure and some results of isostatic reduction using a computer], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 160-167, illus., 1968.

Bel'teneva, Ye. B. *See* Anan'yeva, Ye. M. 267-202

54-058 **Belton, Michael J. S.; Broadfoot, A. Lyle; Hunten, Donald M.** Abundance and temperature of CO_2 on Mars during the 1967 opposition: Jour. Geophys. Research, v. 73, no. 15, p. 4795-4806, illus., tables, 1968.

71-347 **Belyakova, S. I.; Zaytseva, S. A.; Pudovkin, M. I.** Development of a polar storm: Geomagnetism and Aeronomy, v. 8, no. 4, p. 569-573, illus., table, 1968.

71-234 **Belyavskiy, L. I.** Vozmozhnosti ispol'zovaniya strukturno-morfologicheskogo printsipa pri inzhenerno-geologicheskom rayonirovanii gornoskladchatykh oblastey [Possibilities of using the structural-morphologic principle in engineering-geologic zoning of folded mountain regions], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 93-96, 1968.

71-397 **Belyayev, I. I.** Opyt ekspluatatsii magnitometricheskoy apparatury v usloviyakh tropicheskogo klimata [Attempt to use magnetometer apparatus in conditions of a tropical climate]: Geofiz. Apparatura, no. 31, p. 197-199, illus., tables, 1967.

54-302 **Belyayevskiy, N. A.; Borisov, A. A.; Vol'vovskiy, I. S.** Glubinnoye stroyeniya territorii SSSR [Deep structure of the territory of the U.S.S.R.]: Sovetskaya Geologiya, no. 5, p. 56-84, illus., tables, 1967.

72-559 **Belyy, G. P.; Polushanskiy, A. A.; Trum, A. D.** Primeneniye impul'snogo neytron-neytronnogo karotazha na mestorozhdeniyakh Ukrainy [Use of pulsed neutron-neutron logging in the oil fields of the Ukraine], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 165-170, illus., 1968.

71-216 **Belyy, V. F.** Krayevyye vulkanicheskiye poyasa i geosinklinal'nyy protsess (na primere Okhotsko-Chukotskogo vulkanicheskogo poyasa) [Marginal volcanic belts and the geosynclinal process (illustrated by the Okhotsk-Chukotka volcanic belt) (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 200-207, illus., 1968.

Belyy, V. M. *See* Vinogradov, V. I. 275-289

268-234 **Bemmelen, R. W. van.** On the origin and evolution of the Earth's crust and magmas: Geol. Rundschau, v. 57, no. 3, p. 657-705, illus., table, 1968.

272-192 **Bemmelen, Reinout Willem van.** Die Bedeutung der Dimensionen Lange, Zeit, Druck und Temperature in den Erdwissenschaften [The significance of the dimensions, length, time, pressure, and temperature in the earth sciences (with English and Russian summ.)]: Geologie, v. 17, no. 5, p. 497-517, illus., tables, 1968.

Bence, A. E. *See* Wasserburg, G. J. 264-042

274-034 **Bence, A. E.; Burnett, D. S.** Chemistry and mineralogy of the silicates and metal of the Kodaikanal meteorite: Geochim. et Cosmochim. Acta, v. 33, no. 3, p. 387-407, illus., tables, 1969.

Bencze, Pál. *See* Adam, Antal. 265-239

265-031 **Bender, Margaret M.** Mass spectrometric studies of carbon 13 variations in corn and other grasses: Radiocarbon, v. 10, no. 2, p. 468-472, tables, 1968.

265-032 **Bender, Margaret M.; Bryson, Reid A.; Baerreis, David A.** University of Wisconsin radiocarbon dates V: Radiocarbon, v. 10, no. 2, p. 473-478, 1968.

271-019 **Bender, Margaret M.; Bryson, Reid A.; Baerreis, David A.** University of Wisconsin radiocarbon dates VI: Radiocarbon, v. 11, no. 1, p. 228-235, 1969.

270-434 **Bender, Michael L.; Shultz, Cynthia.** The distribution of trace metals in cores from a traverse across the Indian Ocean: Geochim. et Cosmochim. Acta, v. 33, no. 2, p. 292-297, illus., table, 1969.

264-201 **Bender, P. L.; Alley, C. O.; Currie, D. G.; Faller, J. E.** Satellite geodesy using laser range measurements only: Jour. Geophys. Research, v. 73, no. 16, p. 5353-5358, illus., tables, 1968.

Bender, P. L. *See* Alley, C. O. 266-312

274-179 **Benderitter, Y.** Appareillage magnéto-tellurique de prospection pétrolière [Magnetotelluric equipment for petroleum prospecting (with English and Spanish abs.)]: Inst. Francais Petrole Rev., v. 23, no. 5, p. 608-618, illus., 1968.

269-646 **Benderskiy, V. Ya.; Kharaz, I. I.; Yarish, M. S.** Nekotoryye rezul'taty primeneniye sposoba selektsii voln v KMPV [Some results of the use of the wave selection method in refraction surveying]: Razved. Geofizika, no. 27, p. 32-38, illus., 1968.

Benenson, V. A. *See* Mirchink, M. F. 269-278

Benenson, V. A. *See* Mirchink, M. F. 275-372

269-167 **Beneš, Konrád.** Main morphostructural types of circular lunar basins: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 197-199, illus., 1968.

269-168 **Beneš, Konrád.** Linear phenomena in the microrelief of the Luna 9 landing area: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 193-196, illus., 1968.

269-176 **Beneš, Konrád; Katterfel'd, G. N.** On the comparative geology of planets and the term planetology: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 69-94, illus., tables, 1968.

272-143 **Benevides-Soares, P.** Sur une équation d'etat d'intérêt géophysique [On an equation of state of geophysical interest (with English abs.): Annales Géophysique, v. 24, no. 4, p. 895-914, illus., tables, 1968.

67-277 **Benevolenskiy, I. P.** Glubinnoye stroyeniye oblasti Tsentral'no-Kazakhstanskogo gravitatsionnogo minimuma [Deep structure of the region of the Central Kazakhstan gravity minimum]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 3, p. 49-51, illus., 1968.

72-386 **Benevolenskiy, I. P.; Kolesnikov, V. V.; Solodilova, V. V.** O poiskovom znachenii magnitnykh anomaliy Severo-Zapadnogo Pribalkhash'ya [On the prospecting significance of the magnetic anomalies of the area northwest of Lake Balkhash]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 5, p. 62-65, illus., 1968.

Benevolenskiy, I. P. *See* Morozov, M. D. 275-182

64-516 **Ben'ko, Ye. I.; Yekhanin, Ye. V.; Zhadnova, V. P.; Mitalev, I. A.** Sposob kolichestvennogo izucheniya istorii tektonicheskogo razvitiya lokal'nykh podnyatiy na osnovanii seysmorazvedochnykh dannykh [Method of quantitative study of the history of tectonic evolution of local uplifts on the basis of seismic survey data]: Sovetskaya Geologiya, no. 5, p. 97-109, illus., tables, 1968.

67-141 **Ben-Menahem, Ari; Singh, Sarva Jit.** Multipolar elastic fields in a layered half space: Seismol. Soc. America Bull., v. 58, no. 5, p. 1519-1572, illus., tables, 1968.

69-186 **Ben-Menahem, Ari; Jarosch, H.; Rosenman, M.** Large scale processing of seismic data in search of regional and global stress patterns: Seismol. Soc. America Bull., v. 58, no. 6, p. 1899-1932, illus., tables, 1968.

69-230 **Ben-Menahem, Ari; Singh, Sarva Jit.** Eigenvector expansions of Green's dyads with applications to geophysical theory: Royal Astron. Soc. Geophys. Jour., v. 16, no. 4, p. 417-452, illus., 1968.

Ben-Menahem, Ari. *See* Singh, Sarva Jit. 273-143

74-143 **Ben-Menahem, Ari; Singh, Sarva Jit; Solomon, Faïza.** Static deformation of a spherical Earth model by internal dislocations: Seismol. Soc. America Bull., v. 59, no. 2, p. 813-853, illus., tables, 1969.

Ben-Menahem, Ari. *See* Sarva Jit. 274-147

Bennett, J. H. *See* Alexander, E. C., Jr. 270-039

73-504 **Bennett, J. R. P.** Geophysical surveys at the Apley Barn borehole, App. IV *in* The stratigraphy of the Geological Survey Apley Barn borehole, Whitney, Oxfordshire: Great Britain Geol. Survey Bull., no. 29, p. 93-102, illus., tables, 1969.

67-298 **Benseman, R. F.; Fisher, R. G.; Dickinson, D. J.** Survey of surface heat output at Waiotapu, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 50-58, illus., tables, 1963.

Benson, Carl S. *See* Bingham, Douglas K. 267-294

68-248 **Benson, Carl S.** Glaciological studies on Mount Wrangell, Alaska, 1961 [with French and Russian abs.]: Arctic, v. 21, no. 3, p. 127-152, illus., tables, 1968.

Bentley, C. R. *See* Behrendt, J. C. 269-398

67-163 **Benvenuti, G.; Norinelli, A.** Correlazioni tra resistivita' e contenuto pisolitico di mineralizzazioni a bauxite [Correlation between the resistivity and pisolitic content of bauxite mineralization (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 183-194, illus., 1968.

73-179 **Benvenuti, G.; Norinelli, A.** Contributo geofisico alla conoscenza delle strutture sepolte tra i Colli Euganei ed i Berici [Geophysical contributions to knowledge of the buried structure between the Euganei and Berici Hills (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 9, no. 36 (Bari Univ. Ist. Geodesia e Geofisica Pubb., no. 31), p. 269-284, illus., table, 1967.

272-516 **Ben-Yaakov, S.; Kaplan, I. R.** A versatile probe for *in situ* oceanographic measurement: Jour. Ocean Technology, v. 2, no. 3, p. 25-29, illus., 1968.

272-152 **Beránek, Břetislav; Zounková, Milada.** A contribution to the theory of time sections [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 205-238, illus., 1968.

272-222 **Beránek, Břetislav.** Verification of the method of quantitative interpretation of anomalies of the second derivatives of gravity on theoretical models [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sbornik 1967, v. 15, p. 107-132, illus., tables, 1968.

Berckhemer, H. *See* Meissner, R. 265-628

268-182 **Berdichevskiy, M. N.** Elektricheskaya razvedka metodom magnito-telluricheskogo profilirovaniya [Electrical prospecting by the magnetotelluric profiling method]: Moscow, Izdatel'stvo "Nedra," 256 p., illus., tables, 1968.

Berdnikov, V. A. *See* Pavlenkov, A. I. 270-411

274-443 **Beresnev, A. F.; Kovylin, V. M.** Nekotoryye osobennosti glubinnogo stroyeniya zemnoy kory yuzhnoy chasti Yaponskogo morya [Some features of the deep crustal structure of the southern part of the Sea of Japan]: Akad. Nauk SSSR Izv. Ser. Geol., no. 5, p. 17-22, illus., 1969.

Beresnev, A. F. *See* Udintsev, G. B. 275-382

269-645 **Bereza, G. V.** O registratsii seysmicheskikh kolebaniy sposobom peremennoy shiriny [On the recording of seismic vibrations by the variable width method]: Razved. Geofizika, no. 27, p. 28-31, illus., 1968.

270-391 **Bereza, G. V.** Ustroystvo dlya proverki seysmopriyemnikov rasstavlennykh po profilyu [Apparatus for checking seismic geophones arranged along a profile]: Razved. Geofizika, no. 29, p. 50-54, illus., 1968.

264-266 **Berezhnaya, L. T.; Veselov, K. Ye.; Telepin, M. A.** Sposoby ucheta vliyaniya rel'yefa gravimetricheskoy razvedke [A method of allowing for the effect of topography in gravimetric surveying]: Prikladnaya Geofizika, no. 50, p. 140-149, illus., 1967.

268-275 **Berezkin, V. M.** Opredeleniye tsentra mass i drugikh parametrov s pomoshch'yu vtorykh vertikal'nykh proizvodnykh sily tyazhesti d^2g/dz^2 [Determination of the center of mass and other parameters using second vertical derivatives of gravity, d^2g/dz^2]: Prikladnaya Geofizika, no. 52, p. 111-118, illus., 1968.

Berg, E. *See* Kubota, S. 266-556

265-111 **Berg, Eduard.** Relation between foreshocks, stress, and mainshocks: Nature, v. 219, no. 5159, p. 1141-1143, illus., 1968.

Berg, Eduard. *See* Hanson, Kenneth. 267-573

Berg, Eduard. *See* Gedney, Larry. 272-094

Berg, Eduard. *See* Gedney, Larry. 273-124

Berg, Eduard. *See* Gedney, Larry. 275-102

Berg, Joseph W., Jr. *See* Emilia, David A. 264-419

Berg, Joseph W., Jr. *See* Trembly, Lynn D. 269-224

Berg, Joseph W., Jr. *See* Long, Leland Timothy. 272-134

Berg, Otto E. *See* Secretan, Luc. 274-031

-518 **Bergdahl, S.** Skvazhinnyy magnitometr [A borehole magnetometer]: Geofiz. Apparatura, no. 35, p. 5-6, illus., 1968.

Berger, Rainer. *See* Taylor, R. E. 265-007

-022 **Berger, Rainer; Libby, W. F.** UCLA radiocarbon dates VIII: Radiocarbon, v. 10, no. 2, p. 402-416, illus., tables, 1968.

Berger, Rainer. *See* Leakey, L. S. B. 266-002

-017 **Berger, Rainer; Libby, W. F.** UCLA radiocarbon dates IX: Radiocarbon, v. 11, no. 1, p. 194-209, 1969.

Berger, Rainer. *See* Ho, T. Y. 274-001

Berggren, W. A. *See* Phillips, J. D. 264-389

365 **Berishvili, G. P.** Recurrence of SC-storms: Geomagnetism and Aeronomy, v. 7, no. 6, p. 909-911, illus., 1967.

231 **Berkhout, A. W. J.; Sobczak, L. W.** Bouguer anomaly map, Somerset Island and Prince of Wales Island, Northwest Territories: Dominion Observatory Gravity Map Ser., no. 81, scale 1:500,000, separate text, 1967.

287 **Berkman, R. Ya.; Fedotov, V. M.** Vliyaniye chetnykh garmonik v tsepi vozbuzhdeniya pri razlichnykh rezhimakh raboty magnitnykh modulyatsionnykh ustroystv [Effect of the even harmonics in the generating circuit in various regimes of operation of magnetic modulation apparatus]: Geofiz. Apparatura, no. 35, p. 41-48, illus., 1968.

Berkovskiy, A. N. *See* Zander, V. N. 265-306

091 **Berlage, H. P.** The origin of the solar system: London and New York, Pergamon Press (Pergamon Internat. Popular Sci. Ser.), 130 p., illus., tables, 1968.

276 **Berlyand, N. G.** O vybore optimal'nykh parametrov preobrazovaniya gravitatsionnykh poley [On the choice of optimal parameters of transformation of gravity fields]: Prikladnaya Geofizika, no. 52, p. 119-127, illus., 1968.

323 **Berlyayevskiy, N. A.** Novyye dannyye issledovaniy zemnoy kory [New data of investigations of the Earth's crust]: Sovetskaya Geologiya, no. 6, p. 169-176, 1968.

220 **Bernabini, M.** Osservazioni sul comportamento di una apparecchiatura geoelletrica a corrente commutata per misure di resistivita [Observations on the behavior of a commutated-current geoelectrical apparatus for the measurement of resistivity (with English summ.)]: Annali Geofisica, v. 18, no. 4, p. 411-428, illus., 1965.

63 **Bernabini, M.** Rilievo magnetometrico del giacimento di Fornovolasco [Magnetometric survey of the Fornovolasco deposit (with English summ.)]: Annali Geofisica, v. 18, no. 3, p. 279-293, illus., 1965.

81 **Bernaix, J.** New laboratory methods of studying the mechanical properties of rocks: Internat. Jour. Rock Mechanics and Mining Sci., v. 6, no. 1, p. 43-90, illus., tables, 1969.

Bernas, R. *See* Yiou, F. 272-277

81 **Bernat, Michel; Goldberg, Edward D.** Thorium isotopes in the marine environment: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 308-312, illus., tables, 1969.

Berner, R. A. *See* Clayton, R. N. 265-370

99 **Berninghausen, William H.** Tsunamis and seismic seiches of southeast Asia: Seismol. Soc. America Bull., v. 59, no. 1, p. 289-297, tables, 1969.

Bernshteyn, D. A. *See* Trufanov, V. V. 265-688

270-522 **Bernshteyn, D. A.; Kolesnichenko, V. P.; Trufanov, V. V.** Pribor dlya issledovaniya tsementnogo kol'tsa za kolonnoy neftyanykh i gazovykh skvazhin [Device for investigating the cement collar behind the column of oil and gas wells]: Geofiz. Apparatura, no. 35, p. 123-129, illus., 1968.

Berrange, J. P. *See* McConnell, R. B. 275-232

Berry, W. B. N. *See* Boucot, Arthur J. 269-299

265-443 **Berset, G.** Eine Apparatur zur Messung kleiner remanenter Magnetisierungen an Gesteinen (Rock Generator) [An apparatus for measuring small remanent magnetizations of rocks (rock generator) (with English and French summ.)]: Pure and Appl. Geophysics, v. 69, p. 205-228, illus., tables, 1968.

Bertels, A. *See* Phillips, J. D. 264-389

271-383 **Berthelsen, Asger.** Geologic and structural studies around two geophysical anomalies in Troms, northern Norway [with Norwegian abs.]: Norges Geol. Undersökelse Årbok 1966, p. 57-77, illus., table, 1967.

274-174 **Bertin, Jacques.** Some aspects of induced polarization (time domain): Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 401-426, illus., 1968.

Bertsch, W. *See* Engelhardt, W. von. 272-058

Bertsch, W. *See* Engelhardt, W. von. 273-084

274-271 **Beryland, N. G.** Otsenka prakticheskoy neodnoznachnosti resheniya obratnoy zadachi gravimetrii v sluchaye ustupa [Estimation of the practical ambiguity of the solution of the inverse problem of gravimetry in the case of a step]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 94-99, illus., table, 1969.

Berzin, A. K. *See* Savosin, S. I. 272-480

Berzin, A. K. *See* Belov, V. I. 272-484

272-485 **Berzin, A. K.; Vitozhents, G. Ch.; Sulin, V. V.; Shornikov, S. I.** Vozmozhnost primeneniya gamma-aktivatsionnogo metoda dlya kolichestvennogo opredeleniya soderzhaniya tsirkoniya v obraztsakh tsirkoniyevykh rud i kontsentratov [Possibilities of using the gamma-activation method for quantitative determination of the zirconium content in samples of zirconium ores and concentrates], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1 p. 266-274, illus., 1968.

272-568 **Berzin, A. K.; Denisik, S. A.; Lukhminskiy, B. Ye.** Raschet metodom Monte Karlo raspredeleniya fotoneytronov ot puchka gamma-izlucheniya s nachal'noy energiyey 4,1 Mev [Calculation by a Monte Carlo method of the distribution o photoneutrons from a beam of gamma radiation with initial energies of 4.1 Mev], *i* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii Trudy, no. 1, p. 234-241, illus., 1968.

272-569 **Berzin, A. K.; Denisik, S. A.; Lukhminskiy, B. Ye.** Raspredeleniye fotoneytrono ot puchka gamma-izlucheniya s nachal'noy energiyey 4,1 Mev [Distribution o photoneutrons from a beam of gamma radiation with initial energies of 4.1 Mev], *i* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimi Trudy, no. 1, p. 241-244, illus., 1968.

Berzin', L. E. *See* Levin, L. E. 267-200

267-149 **Berzon, I. S.; Pasechnik, V. I.** Dispersii fazovykh skorostey prodol'nyk seysmicheskikh voln v tonkosloistykh sredakh [Phase velocity dispersion of longitudinal seismic waves in thin-layer mediums]: Akad. Nauk SSSR Izv. Fizika Zemli, n 9, p. 47-61, illus., 1968.

74-441 **Berzon, I. S.; Mirtonova, V. A.; Ratnikova, L. I.** Otrazhenyye i refragirovannyye obmennyye volny v slabogradiyentnoy srede s tonkim sloyem [Reflected and refringent converted waves in a medium with a slight gradient and with a thin layer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 53-71, illus., table, 196.

66-034 **Besairie, Henri; Burger, Aluyn J.** Nouvelles mesures d'âge dans le cycle de 500 millions d'années a Madagascar [New age determinations of around 500 m.y. in Madagascar]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 6, p. 572-574, table, 1968.

72-554 **Bespalov, D. F.; Mints, A. Z.; Shkol'nikov, A. S.** Malogabaritnaya neytronnaya trubka tipa UNG-1 [Small-sized neutron tube of UNG-1 type], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 134-143, illus., tables, 1968.

72-560 **Bespalov, D. F.; Kitsenko, Yu. A.; Konoplev, Yu. V.; Romanovskiy, V. F.** Pervyye rezul'taty oprobovaniya impul'snogo neytron-neytronnogo metoda v usloviyakh neftyanykh i gazovykh mestorozhdeniy Krasnodarskogo Kraya [First results of testing of the pulsed neutron-neutron method in the conditions of the oil and gas fields of Krasnodar Territory], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 170-176, illus., table, 1968.

64-355 **Besprozvannaya, A. S.; Gorbushina, G. N.; Driatskiy, V. M.; Zhigalov, L. N.; Ol', A. I.** Rezul'taty geofizicheskikh issledovaniy v vysokikh shirotakh [Results of geophysical investigations in high latitudes]: Problemy Arktiki i Antarktiki, no. 27, p. 134-151, illus., 1967.

66-533 **Bessonova, E. N.; Mikhota, G. G.** Ob interferentsionnykh golovnykh volnakh [On interference head waves], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 263-274, illus., 1968.

67-404 **Best, A.** Periodic fluctuations during geomagnetic storms in middle and high latitudes [with French and Russian abs.]: Annales Geophysique, v. 24, no. 2, p. 603-606, illus., 1968.

72-328 **Best, A.; Fanselau, G.; Grafe, A.; Lehmann, H.-R.; Wagner, Chr.-Ulr.** The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966, *in* Annals of the IQSY—V. 3, The proton flare project (the July 1966 event): Cambridge, Mass., and London, England, M. I. T. Press, p. 413-425, illus., tables, 1969.

65-415 **Best, Adolf.** Eine Analyse quasiperiodischer Variationen des Magnetfeldes wahrend geomagnetischer Sturme [An analysis of quasi-periodic variations of the magnetic field during geomagnetic storms (with English summ.)]: Pure and Appl. Geophysics, v. 69, p. 193-204, illus., tables, 1968.

75-321 **Best, Adolf.** Eine Anwendung der Korrelationsanalyse auf Magnetfeldschwankungen während geomagnetischer Stürme [An application of correlation analysis to magnetic field fluctuations during geomagnetic storms]: Potsdam Geomag. Inst. Abh., no. 40, p. 5-50, illus., tables, 1969.

70-017 **Best, Myron G.; Henage, Lyle F.; Adams, John A. S.** Mica peridotite, wyomingite, and associated potassic igneous rocks in northeastern Utah: Am. Mineralogist, v. 53, nos. 5-6, p. 1041-1048, illus., tables, 1968.

74-318 **Beynon, W. J. G.; Winstanley, E. H.** Geomagnetic disturbance and the troposphere: Nature, v. 222, no. 5200, p. 1262-1263, illus., 1969.

56-203 **Bezrodnov, A. N.** Vliyaniye slozhnykh granits razdela na dinamiku prelomlennykh voln [Effect of complicated discontinuities on the dynamics of refracted waves]: Uzbek. Geol. Zhur., no. 5, p. 76-78, illus., 1966.

267-154 **Bezrudnov, A. N.** Metodika upravleniya gradiyentnymi granitsami v prostranstve i vo vremeni teplovym vozdeystviyem pri dvumernom seysmicheskom modelirovani [A procedure for controlling gradient boundaries in space and in time by heat action in two-dimensional seismic modeling]: Uzbek. Geol. Zhur., no. 3, p. 74-76, 1968.

Bezrukov, G. N. *See* Butuzov, V. P. 268-158

Bezrukov, P. L. *See* Murdmaa, I. O. 274-465

Bezuglaya, L. S. *See* Barsukov, O. M. 267-432

271-061 **Bhagavantam, S.** The Koyna earthquake: Indian Geophys. Union Jour., v. 5, no 1, p. 1-5, 1968.

Bhandari, R. C. *See* Chaudhary, D. R. 267-293

Bhandari, R. C. *See* Agrawal, M. P. 268-303

Bhargava, B. N. *See* Yacob, A. 267-403

275-322 **Bhargava, B. N.; Yacob, A.** Solar cycle response in the horizontal force of the Earth's magnetic field: Jour. Geomagnetism and Geoelectricity, v. 21, no. 1, p. 385 397, illus., tables, 1969.

Bhaskara Rao, V. *See* Jagannadha Sarma, V. V. 264-173

Bhaskara Rao, V. *See* Babu Rao, V. 264-174

264-422 **Bhaskara Rao, V.; Sitapathi Rao, P.** Regional magnetic profiles over the Gondwana sections of the Godavary Valley, *in* Problems in geophysics relating to the crus of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Researc Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys Research Inst., p. 1-22, illus., 1966.

271-285 **Bhaskara Rao, V.; Radhakrishnamurty, I. V.** Average density of surface rocks a Waltair: Indian Geophys. Union Jour., v. 3, no. 2, p. 75-81, illus., table, 1966.

271-287 **Bhaskara Rao, V.; Gangadhara Rao.** Regional gravity and magnetic profile fro Waltair to Hyderabad: Indian Geophys. Union Jour., v. 4, no. 2, p. 75-79, illus., 1967

273-374 **Bhathal, R. S.; Stacey, F. D.** Frequency independence of low-field magneti susceptibility of rocks: Jour. Geophys. Research, v. 74, no. 8, p. 2025-2027, table 1969.

Bhatnagar, A. S. *See* Tewari, S. G. 265-596

274-156 **Bhattacharya, Jayanta.** On the propagation of certain types of surface waves in non-homogeneous elastic layer: Pure and Appl. Geophysics, v. 73, p. 93-98, 1969.

Bhattacharya, P. K. *See* Kaul, I. K. 266-018

Bhattacharya, P. K. *See* Sinha, A. K. 269-240

270-124 **Bhattacharya, P. K.; Patra, H. P.** Direct current geoelectric sounding—Principles and interpretation: Amsterdam, Elsevier Publishing Co. (Methods in geochemistry and geophysics, No. 9), 135 p., illus., tables, 1968.

268-433 **Bhattacharyya, B. K.** Analysis of aeromagnetic data over the Arctic Islands an Continental Shelf of Canada: Canada Geol. Survey Paper 68-44, 14 p., illus., 1968.

273-217 **Bhattacharyya, B. K.** Treatment of non-equispaced two-dimensional data with digital computer—A reply [to discussion of I. K. Crain and B. K. Bhattacharyya 1967 paper by H. A. Winkler, 1969]: Geoexploration, v. 7, no. 1, p. 64-66, 1969.

275-184 **Bhattacharyya, B. K.** Bicubic spline interpolation as a method for treatment of potential field data: Geophysics, v. 34, no. 3, p. 402-423, illus., 1969.

270-368 **Bhattacheryya, A. K.; Potts, E. L. J.** Seismic recording system for the investigation of rockbursts at Kolar Gold Field, India: Freiberger Forschungshefte, C 225, p. 63-67, illus., 1967.

264-401 **Bhimasankaram, V. L. S.** Paleomagnetic investigations on certain rocks of Andhra Pradesh, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 183-195, illus., 1966.

271-047 **Biasini, Alessandro.** Alcuni aspetti morfologici della Luna dalle riprese fotografiche ravvicinate dei Ranger VII, VIII e IX [Some morphologic aspects of the Moon from photographic shots by Ranger VII, VIII, and IX (with English summ.)]: Soc. Geol. Italiana Boll., v. 85, no. 1, p. 3-11, illus., 1966.

267-045 **Bibikova, Ye. V.; Chayka, V. M.; Polyakov, A. L.** Vozrast kristallicheskogo osnovaniya severa Sibirskoy platformy i nekotoryye voprosy obrazovaniya proterozoyskikh slantsevykh tolshch Yeniseyskogo kryazha i Taymyra [Age of the crystalline basement of the northern Siberian platform and some problems of the formation of the Proterozoic schist series of the Yenisei Ridge and the Taimyr]: Geokhimiya, no. 6, p. 733-736, tables, 1968.

Bibikova, Ye. V. *See* Tugarinov, A. I. 272-040

Bibron, R. *See* Mabuchi, H. 265-078

Bibron, R. *See* Leger, C. 269-106

71-120 **Bichenkov, Ye. I.; Garipov, R. M.** Rasprostraneniye voln na poverkhnosti tyazheloy zhidkosti v basseyne s tsilindricheskim dnom [Propagation of waves on the surface of a heavy liquid in a basin with cylindrical bottom], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 174-179, 1968.

71-001 **Bickford, M. E.; Wetherill, G. W.; Barker, Fred; Lee-Hu, Chin-Nan.** Precambrian Rb-Sr chronology in the Needle Mountains, southwestern Colorado: Jour. Geophys. Research, v. 74, no. 6, p. 1660-1676, illus., tables, 1969.

Bickford, M. E. *See* Mose, Douglas G. 271-002

69-031 **Bien, G.; Suess, H.** Transfer and exchange of ^{14}C between the atmosphere and the surface water of the Pacific Ocean, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 105-115, illus., tables, 1967.

64-528 **Bieniawski, Z. T.** The effect of specimen size on compressive strength of coal: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 4, p. 325-335, illus., tables, 1968.

68-584 **Bieniawski, Z. T.** In situ strength and deformation characteristics of coal: Eng. Geology—Internat. Jour., v. 2, no. 5, p. 325-340, illus., table, 1968.

68-588 **Bieniawski, Z. T.** The phenomenon of terminal fracture velocity in rock: Felsmechanik u. Ingenieurgeologie, v. 6, no. 3, p. 113-125, illus., tables, 1968.

75-225 **Biesheuvel, K.** Discussion on "A method of computing residual anomalies from Bouguer gravity map by applying relaxation technique," by M. K. Paul (Geophysics, August 1967, p. 708-719): Geophysics, v. 34, no. 3, p. 480-483, illus., 1969.

Biettmann, D. *See* Mabuchi, H. 265-078

Bignell, J. D. *See* Burton, C. K. 271-022

Bikerman, Michael. *See* Damon, Paul E. 267-030

Bikerman, Michael. *See* Damon, Paul E. 269-072

268-313 **Bikkenina, S. K.; Zhiltsov, E. G.; Livshits, M. Kh.; Nikonova, N. A.; Suvorov, A. A.; Treskova, Yu. A.** Deep seismic sounding in the vicinity of Sakhalin, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 140-146, illus., table, 1968.

267-199 **Bilalov, R. S.; Kamaletdinov, M. A.; Tagirov, I. A.; Shukhmuratov, V. K.** K otsenki perspektiv neftegazonosnosti Magnitogorskogo sinklinoriya na Yuzhnom Urale [On assessing the prospects for oil and gas in the Magnitogorsk synclinorium in the southern Urals]: Geologiya Nefti i Gaza, no. 7, p. 35-39, illus., 1968.

Bilinskiy, A. I. *See* Bondarenko, A. P. 266-231

Bilinskiy, A. I. *See* Bondarenko, A. P. 266-232

272-072 **Binder, Alan B.** Martian craters—Comparison of statistical counts: Science, v 164, no. 3877, p. 297-299, illus., 1969.

267-294 **Bingham, Douglas K.; Benson, Carl S.** Ash temperature variations on Moun Wrangell, Alaska: New Zealand Jour. Geology and Geophysics, v. 11, no. 3, p. 781-786, illus., 1968.

270-038 **Binns, R. A.; Davis, R. J.; Reed, S. J.** Ringwoodite, natural (Mg,Fe)$_2$SiO$_4$ spine in the Tenham meteorite: Nature, v. 221, no. 5184, p. 943-944, illus., tables, 1969.

Binsack, J. H. *See* Siscoe, G. L. 268-374

Biquand, Daniel. *See* Tanguy, Jean-Claude. 268-615

Birch, Francis. *See* Roy, Robert F. 264-276

Birch, Francis. *See* Roy, Robert F. 267-287

272-226 **Birch, Francis; Roy, Robert F.; Decker, Edward R.** Heat flow and thermal histor in New England and New York, Chap. 33 *in* Studies of Appalachian geology northern and marine (Zen, E-an, and others, editors): New York and London, Interscience Publishers, p. 437-451, illus., tables, 1968.

275-299 **Bird, H. H.; Schmidt, G.** Transverse wave propagation and instabilities within th magnetosphere: Jour. Geophys. Research, v. 74, no. 16, p. 3993-4002, illus., table 1969.

269-136 **Bird, T. H.; Smokler, M. I.; Smyth, D. L.** Surveyor VII mission report—Pt. 3 Television data: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32 1264, 306 p., 1968.

271-302 **Birman, Joseph H.** Geothermal exploration for ground water: Geol. Soc. America Bull., v. 80, no. 4, p. 617-630, illus., tables, 1969.

265-377 **Birmingham, Thomas J.; Jones, Frank C.** Identification of moving magnetic fiel lines: Jour. Geophys. Research, v. 73, no. 17, p. 5505-5510, illus., 1968.

272-299 **Birmingham, Thomas J.** Convection electric fields and the diffusion of trappe magnetospheric radiation: Jour. Geophys. Research, v. 74, no. 9, p. 2169-2181, illus., 1969.

Bishop, Charles C. *See* Chapman, Rodger H. 265-313

Bishop, Charles C. *See* Chapman, Rodger H. 267-253

266-317 **Bishop, D. C.** The geometric relationships of structural features associated with major strikeeslip faults in New Zealand: New Zealand Jour. Geology and Geophysics, v. 11, no. 2, p. 405-417, illus., table, 1968.

Bishop, J. R. *See* Cooney, P. M. 272-170

275-001 **Bishop, W. W.; Miller, J. A.; Fitch, F. J.** New potassium-argon age determinations relevant to the Miocene fossil mammal sequence in East Africa: Am. Jour. Sci., v. 267, no. 6, p. 669-699, illus., tables, 1969.

Bisque, Ramon E. *See* Rouse, George E. 274-238

274-322 **Bisque, Ramon E.; Rouse, George E.** Geoid and magnetic field anomalies; their relationship to the core-mantle interface: Mines Mag., v. 58, no. 5, p. 20-22, illus., 1968.

265-193 **Biswas, Arabinda.** Transmission of Love type waves through a Maxwell solid layer sandwiched in homogeneous elastic media: Pure and Appl. Geophysics, v. 69, p. 75-79, illus., 1968.

Biswas, S. K. *See* Nair, M. Ramachandran. 272-167

274-149 **Biswas, S. K.** On forced torsional oscillation of a cylindrical shell of nonhomogeneous material by the application of a periodic shearing force at one end: Pure and Appl. Geophysics, v. 73, p. 39-42, 1969.

274-214 **Bisztricsány, Ede; Egyed, László; Márton, P.; Stegena, László.** Investigations on seismology and the physics of the interior of the Earth in Hungary, 1963-1965: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 19-23, table, 1967.

273-291 **Bjerhammar, Arne.** On the energy integral of satellites: Tellus, v. 21, no. 1, p. 1-9, tables, 1969.

264-558 **Björnsson, Sveinbjörn.** Radon and water in volcanic gas at Surtsey, Iceland: Geochim. et Cosmochim. Acta, v. 32, no. 8, p. 815-821, illus., tables, 1968.

Blackwell, David D. *See* Roy, Robert F. 264-276

Blackwell, David D. *See* Roy, Robert F. 267-287

270-225 **Blackwell, David D.** Heat-flow determinations in the northwestern United States: Jour. Geophys. Research, v. 74, no. 4, p. 992-1007, illus., tables, 1969.

Blake, J. B. *See* Paulikas, G. A. 265-384

Blake, J. B. *See* Paulikas, G. A. 272-298

Blake, W., Jr. *See* Lowdon, J. A. 265-012

Blake, W., Jr. *See* Lowdon, J. A. 271-005

269-668 **Blake, Wilson.** Finite element model study of slope modification at the Kimbley Pit: Soc. Mining Engineers Trans., v. 241, no. 4, p. 525-533, illus., 1968.

266-179 **Blamey, C.; Gibbs, P. G.** The epicenters and origin times of some large explosions: Royal Astron. Soc. Geophys. Jour., v. 16, no. 1, p. 1-7, illus., tables, 1968.

Blanc, Philippe. *See* Vachette, Mireille. 275-014

269-019 **Blanc, Yves; Lasserre, Marc; Perichaud, Jean-Jacques; Vialette, Yves.** Datation au plomb commun de quelques filons des districts de Pontgibaud et de Brioude-Massiac (Massiv Central français) [Dating common lead in some veins of the districts of

Pontgibaud and of Brioude-Massiac (French Massif Central)], *in* Études géochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Géologie et Minéralogie, no. 36, pt. 16, p. 13-30, illus., tables, 1967.

275-038 **Blander, Milton; Abdel-Gawad, Monem.** The origin of meteorites and the constrained equilibrium condensation theory: Geochim. et Cosmochim. Acta, v. 33, no. 6, p. 701-716, illus., table, 1969.

275-423 **Blank, H. Richard, Jr.** Aeromagnetic and gravity surveys of the Crater Lake region, Oregon, *in* Andesite conference guidebook—Internat. Upper Mantle Proj. Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Resources Bull. 62, p. 42-52, illus., 1968.

269-386 **Blank, J. L.; Sill, W. R.** Response of the Moon to the time-varying interplanetary magnetic field: Jour. Geophys. Research, v. 74, no. 3, p. 736-743, illus., 1969.

Blank, J. L. *See* Grobman, W. D. 275-051

265-673 **Blankennagel, Richard K.** Geophysical logging and hydraulic testing, Pahute Mesa, Nevada Test Site: Ground Water, v. 6, no. 4, p. 24-31, illus., 1968.

272-558 **Blankov, Ye. B.; Kurilenko, F. A.** Opyt primeneniya skvazhinnogo neytronnogo impul'snogo generatora metoda impul'snogo neytron-neytronnogo karotazha na neftyanykh mestorozhdeniyakh Tatarii [Attempt to use the borehole neutron pulse generator of the pulsed neutron-neutron logging method on the oil fields of Tatary], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 160-165, illus., 1968.

272-563 **Blankov, Ye. B.; Kaipov, R. L.; Leypunskaya, D. I.; Paklinov, V. A.; Savosin, S. I.; Spiridonov, V. P.; Fedorov, V. V.; Shestakov, L. I.; Shimelevich, Yu. S.** Perspektivy ispol'zovaniya Ac-Be i Po-B neytronnykh istochnikov v promyslovoy i razvedochnoy geofizike [Prospects of using Ac-Be and Po-B neutron sources in logging and exploration geophysics], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 197-205, illus., tables, 1968.

272-564 **Blankova, T. N.** Opredeleniye istochnika obvodneniya deystvuyushchikh skvazhin aktivatisonnym metodom [Determination of the source of flooding of operating wells by an activation method], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 205-209, illus., 1968.

Blashchinskaya, I. L. *See* Kozlov, Ye. A. 268-557

269-206 **Blinov, G. I.; Grin, V. P.; Il'yasov, B.; Lopatina, T. A.; Repina, Z. F.** Nekotoryye rezul'taty kompleksnogo seysmicheskogo mikrorayonirovaniya na uchastke so slozhnoy mikrogeologiyey [Some results of complex seismic microzoning on a sector with complicated microgeology], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 24-58, illus., tables, 1967.

275-375 **Bliskavka, A. G.; Bliskavka, L. G.; Mirzakhanov, M. K.; Ruban, V. I.; Semenovich, V. V.; Khalliyev, S. P.** Modar—pervoye neftegazovoye mestorozhdeniye v Tsentral'nykh Karakumakh [The Modar—First oil and gas field in the Central Kara Kums]: Geologiya Nefti i Gaza, no. 4, p. 24-27, illus., 1969.

Bliskavka, L. G. *See* Bliskavka, A. G. 275-375

Bloch, S. *See* Hales, A. L. 270-240

Block, S. *See* Dziewonski, A. 272-103

270-152 **Blokh, I. M.; Vorob'yev, A. S.; Deynikhovskaya, N. A.; Korolenko, N. G.; Olofinskaya, V. N.** Interpretatsiya rezul'tatov dipol'nogo elektrorazvedochnogo kartirovaniya pri rezikh izmeneniyakh prostiraniya porod [Interpretation of the results of dipole electrical exploration mapping in the case of sharp variations in the strike of the rocks]: Razved. Geofizika, no. 29, p. 85-89, illus., 1968.

Blokhin, P. A. *See* Fedorova, D. P. 266-221

269-637 **Blokhin, P. A.; Gelever, D. A.; Yefimkina, S. S.; Shneyerson, M. B.; Shteynberg, G. G.** Metodika i rezul'taty regional'nykh seysmicheskikh rabot v severo-vostochnom obramlenii Prikaspiyskoy vpadiny [Procedure and results of regional seismic operations in the southeastern framework of the Caspian basin]: Razved. Geofizika, no. 26, p. 3-13, illus., 1968.

270-010 **Bloom, Arthur L.** Postglacial stratigraphy and morphology of central Connecticut, Trip A-1, *in* Guidebook for field trips in Connecticut—New England Intercollegiate Geol. Conf., 60th Ann. Mtg., New Haven, Conn., 1968: Connecticut Geol. and Nat. History Survey Guidebook 2, 7 p., paged separately, illus., table, reprinted 1968; originally published 1965.

272-135 **Blume, John A.** Spectral response to ground displacement at Hattiesburg resulting from nuclear event Salmon: Seismol. Soc. America Bull., v. 59, no. 1, p. 229-244, illus., tables, 1969.

Blundell, D. J. *See* Shotton, F. W. 265-011

271-511 **Blundell, D. J.; Parks, R.** A study of the crustal structure beneath the Irish Sea: Royal Astron. Soc. Geophys. Jour., v. 17, no. 1, p. 45-62, illus., tables, 1969.

270-274 **Bobier, Claude.** Étude paléomagnétique de quelques formations du complexe volcanique d'Almopias (Macédoine centrale, Gréce) [Paleomagnetic study of several formations of the Almopias volcanic complex (central Macedonia, Greece)]: Acad. Sci. Comptes Rendus, Ser. D, v. 267, no. 13, p. 1091-1094, illus., table, 1968.

275-331 **Bobier, Claude.** Étude paléomagnétique des basalts du Plateau du Velay [Paleomagnetic study of the basalts of the Velay Plateau]: Acad. Sci. Comptes Rendus, ser. D, v. 268, no. 1, p. 20-23, illus., 1969.

Bobkov, M. F. *See* Fedotov, S. A. 264-139

Bobkov, M. F. *See* Tokarev, P. I. 265-175

270-142 **Bobritskiy, D. P.; Kuznetsov, M. P.** Vnedreniye nizkochastotnoy elektrorazvedochnoy apparatury IKS-50 v rayonakh Vostochnogo Zabaykal'ya [Introduction of the IKS-50 low-frequency electrical survey apparatus in areas of Eastern Transbaikalia]: Geofiz. Apparatura, no. 35, p. 147-149, illus., 1968.

264-362 **Bobrov, V. N.; Puolokaynen, T. P.; Trofimov, I. L.** Geomagnetic standard of the USSR: Geomagnetism and Aeronomy, v. 7, no. 6, p. 872-873, illus., 1967.

267-429 **Bobrov, V. N.** Simplification of the method of processing magnetograms: Geomagnetism and Aeronomy, v. 8, no. 2, p. 313-314, tables, 1968.

267-430 **Bobrov, V. N.** Experience in work with quartz magnetic variometers under unfavorable meteorological conditions: Geomagnetism and Aeronomy, v. 8, no. 2, p. 316-317, illus., 1968.

267-431 **Bobrov, V. N.** Quartz D-magnetometer: Geomagnetism and Aeronomy, v. 8, no. 2, p. 318-319, illus., 1968.

269-417 **Bobrov, V. N.; Burtsev, Yu. A.** Deflector system for astatic magnetometers: Geomagnetism and Aeronomy, v. 8, no. 3, p. 486-487, illus., 1968.

269-418 **Bobrov, V. N.** Magnetic system for temperature compensation of magnetic instruments: Geomagnetism and Aeronomy, v. 8, no. 3, p. 487-488, illus., 1968.

273-367 **Bobrov, V. N.; Trofimov, I. L.** Measurement of the H and Z components of the geomagnetic field with a proton magnetometer: Geomagnetism and Aeronomy, v. 8, no. 5, p. 735-739, illus., 1968.

274-340 **Bobrov, V. N.** Quartz Z-magnetometer: Geomagnetism and Aeronomy, v. 8, no. 6, p. 884-886, illus., 1968.

264-267 **Bobrov, Yu. V.; Veselov, K. Ye.; Gaynanov, A. G.; Gladun, V. A.; Luginets, A. P.; Smirnov, L. P.** Avtomatizirovannyy nabortnyy gravimetr [Automatized ship-board gravimeter]: Prikladnaya Geofizika, no. 50, p. 150-162, illus., 1967.

268-278 **Bobrov, Yu. V.; Gaynanov, A. G.; Gladun, V. A.; Panteleyev, V. L.; Smirnov, L. P.** Nekotoryye rezul'taty laboratornykh i morskikh ispytaniy avtomatizirovannogo nabortnogo gravimetra ANG [Some results of laboratory and sea tests of the ANG automatic shipboard gravimeter]: Prikladnaya Geofizika, no. 52, p. 139-150, illus., table, 1968.

Bobrovnik, I. I. *See* Monastyrev, V. K. 264-518

Bobrovnik, I. I. *See* Monastyrev, V. K. 264-519

270-408 **Bobrovnik, I. I.; Monastyrev, V. K.** Sposob pogruzhennykh seysmopriyemnikov [The sunken geophone method (with English summ., p. 164)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 92-101, illus., 1968.

275-318 **Bochev, A.** A dipole approximating to the highest possible degree the Earth's magnetic field: Pure and Appl. Geophysics, v. 74, p. 25-28, tables, 1969.

275-319 **Bochev, A.** Two and three dipoles approximating the Earth's main magnetic field: Pure and Appl. Geophysics, v. 74, p. 29-34, tables, 1969.

266-044 **Bochkarev, V. S.; Yagofarova, F. Z.** Novyye dannyye o vozraste skladchatogo fundamenta v rayone shirotnogo Priob'ya Zapadno-Sibirskoy nizmennosti [New data on the age of the folded basement in the region of the east-west course of the Ob in the West Siberian Lowland]: Akad. Nauk SSSR Doklady, v. 181, no. 3, p. 676-678, illus., 1968.

264-248 **Bock, R. O.; Wing, C.** A new ocean-floor gravimeter utilizing a vibrating string accelerometer, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 195-199, illus., 1967.

266-204 **Bodmer, René; Ward, S. H.; Morrison, H. F.** On induced electrical polarization and ground water: Geophysics, v. 33, no. 5, p. 805-821, illus., 1968.

266-207 **Bodmer, René; Ward, Stanley H.** Continuous sounding-profiling with a dipole-dipole resistivity array: Geophysics, v. 33, no. 5, p. 838-842, illus., 1968.

264-584 **Bodunov, V. P.; Tarasov, V. N.** Termostoykaya teleizmeritel'naya sistema [A heat-resistant telemetering system]: Geofiz. Apparatura, no. 33, p. 154-163, illus., 1967.

270-527 **Bodunov, V. P.** K raschetu teplovogo rezhima skvazhinnogo pribora [On the calculation of the thermal regime of a well instrument]: Geofiz. Apparatura, no. 36, p. 134-140, illus., 1968.

271-155 **Bodunov, V. P.** Metrologicheskiye kharakteristiki termostoykikh radioelektronnykh komponentov [Metrological characteristics of heat-resistant radioelectronic components]: Geofiz. Apparatura, no. 31, p. 144-153, illus., table, 1967.

271-571 **Bodunov, V. P.; Tarasov, V. N.** Elektricheskiye kharakteristiki odnozhil'nogo karotazhnogo kabelya [Electrical characteristics of single-strand logging cable]: Geofiz. Apparatura, no. 31, p. 123-129, illus., 1967.

273-305 **Bodvarsson, Gunnar.** On the temperature of water flowing through fractures: Jour. Geophys. Research, v. 74, no. 8, p. 1987-1992, 1969.

Boelrijk, N. A. I. M. *See* Priem, H. N. A. 266-030

Boelrijk, N. A. I. M. *See* Priem, H. N. A. 269-012

Boelrijk, N. A. I. M. *See* Priem, H. N. A. 270-015

264-018 **Bofinger, V. M.; Compston, W.; Vernon, M. J.** The application of acid leaching to the Rb-Sr dating of a Middle Ordovician shale: Geochim. et Cosmochim. Acta, v. 32, no. 8, p. 823-833, illus., tables, 1968.

272-046 **Bogard, D. D.; Burnett, D. S.; Wasserburg, G. J.** Cosmogenic rare gases and the K-40:Ar-40 age of the Kodaikanal iron meteorite: Earth and Planetary Sci. Letters, v. 5, no. 6, p. 273-281, illus., tables, 1969.

Bogdan, I. D. *See* Matveyev, P. S. 266-171

Bogdanova, S. V. *See* Nevolin, N. V. 269-271

270-394 **Bogdanovskiy, E. M.** Sravneniye metodov statisticheskogo analiza pri obnaruzhenii poleznykh signalov na fone pomekh [Comparison of methods of statistical analysis in detecting useful signals against a background of noise]: Geofiz. Apparatura, no. 35, p. 89-98, illus., tables, 1968.

Bogomazova, T. A. *See* Lishnevskiy, E. N. 270-218

265-334 **Bogomolov, Yu. G.** Some problems of geothermics and hydrogeothermics of the Siberian platform: Internat. Assoc. Sci. Hydrology Bull., v. 13, no. 2, p. 154-162, illus., tables, 1968.

272-022 **Boissonnas, J.; Borsi, S.; Ferrara, G.; Fabre, J.; Fabries, J.; Gravelle, M.** On the Early Cambrian age of two late orogenic granites from west-central Ahaggar (Algerian Sahara) [with French abs.]: Canadian Jour. Earth Sci., v. 6, no. 1, p. 25-37, illus., tables, 1969.

266-328 **Bokun, A. N.** Opyt vyyavleniya tektonicheskoy aktivnosti geologicheskikh struktur i razlomov na osnove dannykh nivelirovaniya [Attempt to recognize tectonic activity of geologic structures and faults on the basis of leveling data (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 37-44, illus., 1967.

270-070 **Bollinger, G. A.** The Narrows, Virginia, earthquake of March 8, 1968: Earthquake Notes, v. 39, nos. 3-4, p. 35-47, illus., tables, 1968.

265-425 **Bolsakova, A. V.; Troitskaya, V. A.** Svyaz' napravleniya mezhplanetnogo magnitnogo polya s rezhimom ustoychivykh kolebaniy [Relationship between the direction of the interplanetary magnetic field and the regime of steady oscillations]: Akad. Nauk SSSR Doklady, v. 180, no. 2, p. 343-346, illus., 1968.

267-447 **Bol'shakov, A. S.; Solodovnikov, G. M.** Namagnichennost' obozhzhennykh kontaktov i paleomagnitnaya stabil'nost' gornykh porod [Magnetization of baked contacts and the paleomagnetic stability of the rocks]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 95-101, illus., tables, 1968.

275-342 **Bol'shakov, A. S.; Solodovnikov, G. M.** Napryazhennost' drevnego magnitnogo polya Zemli v pliotsen-chetvertichenoye vremya [Intensity of the ancient magnetic field of the Earth in Pliocene-Quaternary time]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 88-93, illus., tables, 1969.

Bol'shakov, B. Ye. *See* Belov, Yu. P. 270-245

Bolshakova, O. V. *See* Troitskaya, V. A. 267-407

269-182 **Bolt, B. A.; Lomnitz, Cinna; McEvilly, T. V.** Seismological evidence on the tectonics of central and northern California and the Mendocino escarpment: Seismol. Soc. America Bull., v. 58, no. 6, p. 1725-1767, illus., tables, 1968.

269-199 **Bolt, Bruce; O'Neill, M.; Qamar, A.** Seismic waves near 110°—Is structure in core or upper mantle responsible,: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 475-487, illus., tables, 1968.

265-107 **Bolt, Bruce A.** Estimation of PKP travel times: Seismol. Soc. America Bull., v. 58, no. 4, p. 1305-1324, illus., tables, 1968.

271-539 **Bombolakis, E. G.** Photoelastic study of initial stages of brittle fracture in compression: Tectonophysics, v. 6, no. 6, p. 461-473, illus., 1968.

266-303 **Bomford, G.; Robbins, A. R.** The direction of the minor axis of geodetic reference spheroids [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 37-43, illus., 1968.

270-216 **Bonasia, V.; Oliveri del Castillo, A.** Average density of stratigraphic sequences at Vesuvius and Phlaegraean Fields at different heights: Bull. Volcanol., v. 32, no. 2, p. 415-423, illus., 1968.

264-211 **Bonatti, Enrico.** Fissure basalts and ocean-floor spreading on the East Pacific Rise: Science, v. 161, no. 3844, p. 886-888, illus., 1968.

264-544 **Bonatti, Enrico.** Ultramafic rocks from the Mid-Atlantic Ridge: Nature, v. 219, no. 5152, p. 363-364, illus., tables, 1968.

Bonatti, Enrico. *See* Funkhouser, John G. 268-006

269-216 **Bonatz, Manfred.** Ergebnisse von Parallelregistrierungen mit zwei Askania-Gravimetern in der Erdgezeitenstation Bonn [Results of parallel recordings with two Askania gravimeters at the Bonn earth tide station (with English summ.)]: Deutsch. Geod. Komm. Veröffentl., Series B, no. 158, 62 p., illus., tables, 1968.

270-089 **Bonatz, Manfred.** Der Einfluss der Luftdichte auf die Schwingungszeit von Horizontalpendeln [The effect of air density on the oscillation time of horizontal pendulums (with English abs.)]: Gerlands Beitr. Geophysik, v. 76, no. 6, p. 491-496, 1967.

272-116 **Bonchev, E.; Gochev, P. M.; Petkov, I.; Khaydutov, I.; Tsankov, Ts.; Chumachenko, P.** V''rkhu kharakteristikata na Skopskoto zemetresenie (26.VII.1963 g.) [On the characteristic of the Skopje earthquake (July 26, 1963) (with Russian and German summ.)] B''lgarska Akad. Nauk Otdel. Geol. i Geog. Nauki Izv., v. 14, p. 69-89, illus., 1965.

267-235 **Bonchkovskiy, V. F.** Vekovoy khod naklonov zemnoy poverkhnosti v sopostavlenii s epeyrogenicheskimi dvizheniyami [Secular course of tilts of the Earth's surface in comparison with epeirogenic movements], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 5-16, illus., table, 1968.

265-398 **Bond, F. R.** Magnetic and auroral conjugacy [with French abs.]: Annales Géophysique, v. 24, no. 2, p. 459-465, illus., 1968.

Bond, F. R. *See* Jacka, F. 265-404

267-234 **Bondarchuk, V. G.** Rozvytok vchennya pro pokhorzhennya ī strukturu zemnoyi kory v roky Radyans'koyi vlady [Development of study on the origin and structure of the Earth's crust in the years of Soviet rule (in Ukrainian with Russian summ.)]: Akad. Nauk Ukrayin. RSR Heol. Zhur., v. 27, no. 3, p. 3-15, illus., 1967.

7-327 **Bondarchuk, V. G.** Heolohīchna struktura Ukrayinskoyi RSS ta problemy tektonīky [Geologic structure of the Ukrainian S.S.R. and problems of tectonics (in Ukrainian with Russian summ.)]: Akad. Nauk Ukrayin. RSR Heol. Zhur., v. 27, no. 4, p. 3-18, illus., 1967.

6-231 **Bondarenko, A. P.; Bilinskiy, A. I.** K analiza asimptoticheskikh vyrazheniy krivykh glubinnogo magnitotelluricheskogo zondirovaniya [On the analysis of the asymptotic expressions of the curves of deep magnetotelluric sounding (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 137-142 , 1967.

6-232 **Bondarenko, A. P.; Bilinskiy, A. I.; Shilova, A. M.** Glubinnoye magnitnotelluricheskoye zondirovaniya na stantsii "Odessa" [Deep magnetotelluric sounding at "Odessa" station (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 158-163, illus., tables, 1967.

5-180 **Bondarenko, I. G.** Proverka geofizicheskikh dannykh bureniyem v vostochnom Priazov'ye [Verification of geophysical data by drilling in the eastern Azov area (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 42-52, illus., 1969.

9-699 **Bondarenko, M.** Oblast' primeneniya metoda bokovogo karotazha [Field of application of the lateral logging method]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 53-56, illus., 1968.

Bone, M. N. *See* White, W. R. H. 268-534

Boneff, N. *See* Katterfeld, G. N. 269-317

Bonini, William E. *See* Behrendt, John C. 273-204

2-383 **Bonnet, Guy.** Étude des anomalies magnétiques du volcan Nyiragongo—Corps de révolution [Study of magnetic anomalies of Nyiragongo Volcano—Body of revolution]: Acad. Royale Sci. Outre-Mer Cl. Sci. Tech. Mém., new ser., v. 16, pt. 1, 92 p., illus., 1964.

7-027 **Boocock, C.** Special investigations—(a) Age determinations on rocks; (b) paleomagnetic measurements: Botswana Geol. Survey Dept. Ann. Rept. 1966, p. 17-18, table [1967,].

2-031 **Boocock, C.** Age determinations on rocks: Botswana Geol. Survey Dept. Ann. Rept. 1967, p. 19-21, table [1968,].

-262 **Booker, J. R.** Geomagnetic data and core motions: Royal Soc. [London] Proc., v. 309, no. 1496, p. 27-40, illus., tables, 1969.

-423 **Books, Kenneth G.** Magnetization of the lowermost Keweenawan lava flows in the Lake Superior area, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D248-D254, illus., table, 1968.

-253 **Boore, David M.; Toksoz, M. Nafi.** Rayleigh wave particle motion and crustal structure: Seismol. Soc. America Bull., v. 59, no. 1, p. 331-346, illus., tables, 1969.

Borchardt, Glenn A. *See* Theisen, Arthur A. 265-594

-601 **Borcherdt, R. D.; Healy, J. H.** A method for estimating the uncertainty of seismic velocities measured by refraction techniques: Seismol. Soc. America Bull., v. 58, no. 6, p. 1769-1790, illus., tables, 1968.

-157 **Borcherdt, Roger.** Spectral analysis of seismic measurements from explosions in southern Mississippi: U.S. Geol. Survey Prof. Paper 600-C, p. C113-C119, illus., 1968.

268-123 **Borges, J. Ferry.** How to design structures to resist earthquakes, *in* Proceedings of the International Seminar on Earthquae Enginje Yugoslav, 64: PIAIS, UNESCO, p.448 ilus., 1968.

Borisenko, V. G. *See* Tokhtuyev, G. V. 269-672

270-083 **Borisevich, Ye. S.; Kirnos, D. P.** Apparatura dlya zapisi kolebaniy, vyzyvayemykh zemletryaseniyami [Apparatus for recording vibrations caused by earthquakes]: Akad. Nauk SSSR Vestnik, no. 11, p. 75-80, illus., 1968.

Borisov, A. A. *See* Belyayevskiy, N. A. 264-302

Borisov, A. A. *See* Beliayevsky, N. A. 265-354

269-371 **Borisov, A. A.** Stroyeniye i razvitiye zemnoy kory territorii SSSR [Structure and development of the Earth's crust in the territory of the U.S.S.R. (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 7-14, illus., 1968.

Borisov, A. A. *See* Amurskiy, G. I. 273-467

267-241 **Borisova, A. A.** Geofizicheskaya kharakteristika glubinnykh razlomov na territorii SSSR [Geophysical characteristics of deep fractures in the territory of the U.S.S.R.], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 341-345, illus., 1968.

270-092 **Borodayeva, N. M.** O chislennom reshenii odnomernoy obratnoy dinamicheskoy zadachi seysmiki [On the numerical solution of the one-dimensional inverse dynamic problem of seismics], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 85-91, table, 1967.

265-646 **Borodin, B. P.; Gurov, V. N.; Mlotek, V. I.; Tal'virskiy, D. B.** Novyye dannyye o tektonike severa Krasnoyarskogo kraya v predelakh levoberezh'ya r. Yenisey [New data on the structure of the northern Krasnoyarsk Territory on the left bank of the Yenisei River]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 3-6, illus., 1968.

269-211 **Borodin, L. A.** Opredeleniye form i chastot svobodnykh kolebaniy sooruzheniy so slozhnoy konstruktivnoy skhemoy [Determination of the shape and frequencies of free vibrations of structures with complex construction scheme], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otde Seysmologii, p. 97-117, illus., 1967.

264-430 **Borodin, P. M.; Mel'nikov, A. V.; Morozov, A. A.; Chernyshev, Yu. S.** Yadernyy magnitnyy rezonans v zemnom pole [Nuclear magnetic resonance in the Earth's field]: Leningrad., Izdatel'stvo Leningrad. Univ., 232 p., illus., 1967.

266-035 **Borsi, S.; Ferrara, G.** Determinazione dell'eta delle rocce intrusive di Predazzo con i metodi del Rb:Sr e K:Ar [Determination of the age of the intrusive rocks of Pre dazzo by the Rb-Sr and K-Ar methods (with English abs.)]: Mineralog. et Petrog Acta 1967, v. 13, p. 45-66, illus., tables, 1968.

Borsi, S. *See* Boissonnas, J. 272-022

272-028 **Borsi, S.** Contributo alla conoscenza dell'eta e della origine magmatica del vul canismo dell'isola di Capraia (Arcipelago Toscano) [Contribution to knowledge of the age and magmatic origin of the volcanism of Capraia Island (Tuscan Archipelago) (with English abs.)]: Soc. Toscana Sci. Nat. Atti, Mem.-Ser. A, v. 70 pt. 1, p. 232-234, illus., tables, 1967.

275-020 **Borsi, Sergio; Ferrara, Giorgio; Piccoli, Giuliano.** Determinazione col metodo K-Ar dell'eta delle eruzioni Euganee [Determination by the K-Ar method of the age o the Euganee eruptions]: Soc. Italiana Mineralogia e Petrologia Rend., v. 25, pt. 1, p. 27-34, illus., tables, 1969.

Bortnitskaya, V. M. *See* Safarov, I. P. 264-596

65-473 **Bortsov, V. D.; Zhigarlovskiy, I. M.** Kompensator temperaturnogo smeshcheniya nulya v magnitometrov s ferrozondovymi datchikami [A compensator for temperature displacement of the zero in magnetometers with fluxgate sensors]: Geofiz. Apparatura, no. 27, p. 149-153, illus., 1966.

Borutskiy, B. Ye. *See* Shlyukova, Z. V. 275-286

74-428 **Bosc, Paul; Súarez, Manuel.** Influencia de una convergencia sobre el cierre de una estructura en profundidad [Influence of a convergence on the closure of a structure at depth]: Boliviano Inst. Petróleo Bol., v. 9, no. 1, p. 7-11, illus., 1969.

75-144 **Bosschart, R. A.** Applications and limitations of airborne electromagnetic systems in mineral exploration: Mining in Canada, May 1969, p. 19-28, illus., 1969.

74-171 **Bosschart, Robbert A.** Ground EM prospecting selection and adaptation of methods: Mining in Canada, December 1968, p. 13-19, illus., 1968.

Bosshard, E. *See* Dash, B. P. 268-340

Bostrom, C. O. *See* Williams, D. J. 273-343

Boström, Kurt. *See* Fisher, David E. 275-260

Bostrom, R. C. *See* Vali, V. 265-287

58-118 **Bostrom, R. C.; Vali, V.** Strains recorded on a high magnification interferometric seismograph: Nature, v. 220, no. 5171, p. 1018-1020, illus., 1968.

58-240 **Bostrom, R. C.** The oceanic ridge system in the northeast Pacific: Pacific Geology, v. 1, p. 1-21, illus., table, 1968.

59-609 **Bostrom, R. C.; Vali, V.** A seismograph to observe deviatoric strains: Trend Eng., v. 20, no. 4, p. 7-12, 40, illus., 1968.

Bostrom, R. C. *See* Vali, V. 271-191

5-411 **Boström, Rolf.** Currents in the ionosphere and magnetosphere [with French abs.]: Annales Géophysique, v. 24, no. 2, p. 681-694, illus., 1968.

5-464 **Bosum, W.; Hahn, A.** Aeromagnetic surveying in the Upper Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 89-91, illus., 1967.

5-043 **Botan, Edward A.** Examination of "organized elements" from the Orgueil Meteorite by quantitative fluorescence microscopy: Aerospace Medicine, v. 36, no. 11, p. 1069-1076, illus., table, 1965.

6-242 **Bott, M. H. P.** The geological structure of the Irish Sea basin, *in* Geology of shelf seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver and Boyd, p. 93-115, illus., 1968.

7-620 **Bottari, A.; Riuscetti, M.** La stazione sismica di Serra La Nave sull'Etna [The Serra La Nave seismic station on Etna (with English summ.)]: Annali Geofisica, v. 20, no. 3, p. 243-264, illus., tables, 1967.

270-248 **Bottinga, Y.** Calculated fractionation factors for carbon and hydrogen isotop exchange in the system calcite-carbon dioxide-graphite-methane-hydrogen-wate vapor: Geochim. et Cosmochim. Acta, v. 33, no. 1, p. 49-64, illus., tables, 1969.

272-280 **Bottinga, Y.** Carbon isotope fractionation between graphite, diamond, and car bon dioxide: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 301-307, illus., tables 1969.

Bottino, M. L. *See* Dietrich, R. V. 269-007

267-001 **Bottino, Michael L.; Fullagar, Paul D.** The effects of weathering on whole-roc Rb-Sr ages of granitic rocks: Am. Jour. Sci., v. 266, no. 8, p. 661-670, illus., tables 1968.

Bottino, Michael L. *See* Fullagar, Paul D. 269-068

275-084 **Boucher, Gary; Ryall, Alan; Jones, Austin E.** Earthquakes associated with un derground nuclear explosions: Jour. Geophys. Research, v. 74, no. 15, p. 3808-382 illus., tables, 1969.

269-299 **Boucot, Arthur J.; Berry, W. B. N.; Johnson, J. G.** The crust of the Earth from lower Paleozoic point of view, *in* The history of the Earth's crust, a symposiu (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Pri ceton, N. J., Princeton Univ. Press, p. 208-225, illus.; discussion, p. 225-228, 1968.

269-053 **Boudin, A.** Développement de la méthode de mesure d'âge roches fondée s le rapport lutetium-176/hafnium-176 [Development of the method of measuring th age of rocks based on the lutetium-176/hafnium-176 ratio (with English abs.)], i Radioactive dating and methods of low-level counting—IAEA-ICSU Symposiu Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 515-52 illus., table, 1967.

Boulay, Jean-Louis. *See* Tazieff, Haroun. 269-691

Boulogne, A. R. *See* Keys, W. Scott. 274-482

267-412 **Bouška, Jan.** Electromagnetic solar-terrestrial events between February 5- 1965 [with French abs.]: Annales Geophysique, v. 24, no. 3, p. 807-812, illus., tabl 1968.

266-051 **Bouška, Vladimír.** On the original rocks source of tektites: Lithos, v. 1, no. 2, 102-112, illus., 1968.

Bouška, Vladimír. *See* King, Elbert A., Jr. 269-108

Boustead, J. *See* Axon, H. J. 273-092

Bouwer, R. F. *See* Hugo, P. J. 267-567

266-511 **Bouysse, Philippe; Horn, Robert; LeGorgen, Jean-Pierre.** Résultats d'u prospection de sismique réflexion continue en Bretagne méridionale, entre Pe marc'h et Belle-Île (France) [Results of seismic reflection prospecting in southe Bretagne, between Penmarc'h and Belle-Île (France)]: Acad. Sci. Comptes Rend ser. D, v. 267, no. 6, p. 568-571, illus., 1968.

270-356 **Bouysse, Philippe; Horn, Robert; Leclaire, Lucien.** Données nouvelles sur le Go du Cap Breton (Golfe de Gascogne, France) [New information on the submarine va ley of Cap Breton (Gulf of Gascony, France)]: Acad. Sci. Comptes Rendus, Ser. D, 267, no. 8, p. 827-830, illus., 1968.

Bower, Margaret E. *See* Godby, E. A. 268-422

265-046 **Bowes, D. R.** The absolute time scale and the subdivision of Precambrian rocks Scotland: Geol. Foren. Stockholm Forh., v. 90, pt. 2, p. 175-188, illus., table, 1968.

4-242 **Bowin, Carl O.** Geophysical study of the Cayman Trough: Jour. Geophys. Research, v. 73, no. 16, p. 5159-5173, illus., 1968.

Bowles, Kenneth L. *See* Smith, William B. 268-095

7-265 **Boyarskiy, E. A.; Kogan, M. G.** Lineynoye sglazhivaniye izmereniy s morskimi gravimetrami [Linear smoothing of measurements with sea gravimeters]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 95-100, illus., 1968.

7-607 **Boyce, R. E.; Smith, E. L.** Geomorphology of Erben Guyot: Marine Geology, v. 6, no. 2, p. 179-183, illus., 1968.

4-051 **Boyce, William M.** Selenodetic implications of mascons: Science, v. 164, no. 3884, p. 1189-1190, tables, 1969.

Boyd, F. R. *See* Bell, Peter M. 273-054

Boyd, G. M. *See* Duffus, H. J. 264-347

Bozhko, G. N. *See* Savarenskiy, Ye. F. 274-290

Brace, L. H. *See* Findlay, J. A. 274-314

4-188 **Brace, W. F.; Orange, A. S.** Further studies of the effects of pressure on electrical resistivity of rocks: Jour. Geophys. Research, v. 73, no. 16, p. 5407-5420, illus., tables, 1968.

Brace, W. F. *See* Byerlee, James D. 266-089

5-110 **Brace, W. F.** Current laboratory studies pertaining to earthquake prediction, *in* Earthquake prediction—Proceedings of a symposium, Zürich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 75-87, illus., 1968.

5-540 **Brace, W. F.; Martin, R. J., 3d.** A test of the law of effective stress for crystalline rocks of low porosity: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 5, p. 415-426, illus., tables, 1968.

Brace, W. F. *See* Greenberg, Richard J. 273-164

-244 **Brace, W. F.** The mechanical effects of pore pressure on fracturing of rocks, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 113-123, illus., table; discussion, p. 124, 1969.

-316 **Brace, W. F.; Scholz, C. H.; LaMori, P. N.** Isothermal compressibility of kyanite, andalusite, and sillimanite from synthetic aggregates: Jour. Geophys. Research, v. 74, no. 8, p. 2089-2098, illus., tables, 1969.

Brace, William F. *See* Byerlee, James D. 272-506

-429 **Bracey, Dewey R.** Structural implications of magnetic anomalies north of the Bahama-Antilles Islands: Geophysics, v. 33, no. 6, p. 950-961, illus., tables, 1968.

-112 **Braddock, R. D.** On tsunami propagation: Jour. Geophys. Research, v. 74, no. 8, p. 1952-1957, illus., tables, 1969.

-250 **Bradley, C. L.; Sandberg, H. J.; DeMatteo, J.** Identification of deflection of the vertical using an inertial system, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 205-216, illus., tables, 1967.

-602 **Bradley, Charles C.** The resistograph and the compressive strength of snow: Jour. Glaciology, v. 7, no. 51, p. 499-506, illus., 1968.

-035 **Bradley, William C.; Addicott, Warren O.** Age of first marine terrace near Santa Cruz, California: Geol. Soc. America Bull., v. 79, no. 9, p. 1203-1209, 1968.

272-511 **Brady, B. T.** The nonlinear mechanical behavior of brittle rock—Pt. 1, Stre strain behavior during regions I and II: Internat. Jour. Rock Mechanics and Mini Sci., v. 6, no. 2, p. 211-225, illus., 1969.

273-480 **Brady, B. T.** A statistical theory of brittle fracture for rock materials—Pt. 1, B tle failure under homogeneous axisymmetric states of stress: Internat. Jour. R Mechanics and Mining Sci., v. 6, no. 1, p. 21-42, illus., 1969.

264-583 **Bragin, A. A.; Fedoriv, R. F.** Osobennosti primeneniya korrektiruyushchikh tegratorov v radiometricheskoy apparature [Features of the use of correction tegrators in radiometric apparatus]: Geofiz. Apparatura, no. 33, p. 133-142, ill 1967.

266-573 **Bragin, A. A.; Migunov, B. B.; Nedostup, G. A.; Orekhov, O. R.; Chesnokov, D.; Shikhman, M. S.** Modernizatsiya paneli upravleniya apparatury DR [Modernization of the control panel of DRST apparatus]: Razved. Geofizika, no. p. 105-108, illus., 1968.

270-170 **Bragin, A. A.; Fedoriv, R. F.** Universal'nyy lineynyy izmeritel' otnosheniya int sivnostey [Universal linear relative intensity meter]: Geofiz. Apparatura, no. 35 130-136, illus., 1968.

264-360 **Braginskiy, S. I.** Magnetic waves in the Earth's core: Geomagnetism and Aero my, v. 7, no. 6, p. 851-859, illus., 1967.

Brahman, N. Krishna. *See* Qureshy, M. N. 266-338

264-414 **Brakl, J.; Clay, C. S.; Rona, P. A.** Interpretation of a magnetic anomaly on continental rise off Cape Hatteras: Jour. Geophys. Research, v. 73, no. 16, p. 53 5315, illus., 1968.

268-619 **Branch, C. D.** Mount Balbi volcano complex, Bougainville, T.P.N.G., *in* S papers from the Vulcanological Observatory, Rabaul, New Britain: Australia Mineral Resources, Geology and Geophysics Rept., no. 107, p. 1-9, illus., 1967.

268-620 **Branch, C. D.** Mount Bagana and Lake Loloru, Bougainville, T.P.N.G., *in* S papers from the Vulcanological Observatory, Rabaul, New Britain: Australia Mineral Resources, Geology and Geophysics Rept., no. 107, p. 11-15, illus., 1967

268-621 **Branch, C. D.** Volcanic activity at Lake Dakataua Caldera, New Britain, *in* S papers from the Vulcanological Observatory, Rabaul, New Britain: Australia Mineral Resources, Geology and Geophysics Rept., no. 107, p. 21-25, illus., 1967

268-622 **Branch, C. D.** April 1964 eruption of Manam Volcano, *in* Short papers from Vulcanological Observatory, Rabaul, New Britain: Australia Bur. Mineral Resour Geology and Geophysics Rept., no. 107, p. 27-33, illus., 1967.

268-623 **Branch, C. D.** Volcanic activity at Mount Yelia, New Guinea, *in* Short pa from the Vulcanological Observatory, Rabaul, New Britain: Australia Bur. Min Resources, Geology and Geophysics Rept., no. 107, p. 35-39, illus., 1967.

270-075 **Branch, D. D.** Effect at Rabaul of seismic sea waves generated by the G Alaskan earthquake of 28 March 1964, *in* Short papers from the Vulcanological servatory, Rabaul, New Britain: Australian Bur. Mineral Resources, Geology Geophysics Rept., no. 107, p. 17-19, illus., 1967 .

Brandau, B. L. *See* Rona, E. 271-029

Brandenberger, F. *See* Haefeli, R. 273-284

Brandt, S. B. *See* Tauson, L. V. 275-024

Braslavskiy, B. Ya. *See* Khalevin, N. I,. 267-133

478 **Braun, R. L.; Kahn, J. S.; Weissmann, S.** X-ray diffraction analysis of plastic deformation in the Salmon event: Jour. Geophys. Research, v. 74, no. 8, p. 2103-2117, illus., 1969.

103 **Brazee, R. J.; Stover, C. W.** The distribution of earthquakes with respect to magnitude (m_B): Seismol. Soc. America Bull., v. 59, no. 2, p. 1015-1017, illus., tables, 1969.

109 **Breiner, Sheldon; Kovach, Robert L.** Local magnetic events associated with displacement along the San Andreas fault (California), *in* Earthquake prediction—Proceedings of a symposium, Zurich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 69-73, illus., 1968.

275 **Breiner, Sheldon; Kovach, Robert L.** Search for piezomagnetic effects on the San Andreas fault, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 111-116, illus., 1968.

091 **Brett, Robin.** Opaque minerals in drill cuttings from Meteor Crater, Arizona, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D179-D180, 1968.

364 **Brezgunov, V. S.; Vlasova, L. S.; Soyfer, V. N.** Izotopnyy sostav vodoroda podzemnykh vod i neftey v svyazi s ikh proiskhozhdeniyem [Isotopic composition of the hydrogen of ground waters and oils in relation to their origin (with English summ.)]: Geokhimiya, no. 1, p. 80-98, illus., tables, 1968.

Brezgunov, V. S. *See* Pinneker, Ye. V. 269-384

Brezgunov, V. S. *See* Alekseyev, F. A. 272-481

400 **Briden, J. C.; Irving, E.** Paleolatitude spectra of sedimentary paleoclimatic indicators, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 199-224, illus., 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 104-129, illus., 1968.

371 **Briden, J. C.** Preliminary palaeomagnetic results from the Adelaide System and Cambrian of South Australia: Royal Soc. South Australia Trans. 1967, v. 91, p. 17-25, illus., tables, 1967.

429 **Briden, James C.** Paleoclimatic evidence of a geocentric axial dipole field, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 178-194, illus., tables, discussion, 1968.

Bridge, H. S. *See* Siscoe, G. L. 268-374

30 **Brieden, H.-J.** Untertägige Slingrammessungen im Werra-Kalirevier zur Festlegung laugengefährdeter Grubenbaue [Underground Slingram measurements in the Werra potash district to establish lye-endangered mine workings]: Frieberger Forschungshefte, C 226, no. 137-148, illus., 1967.

47 **Brighenti, Giovanni.** Comprimibilità e permeabilità di rocce clastiche – Studio su cella triassiale [Compressibility and permeability of clastic rocks—Study on triaxial cell]: Accad. Sci. Ist. Bologna Atti, Cl. Sci. Fis. Rend. 1965-66, ser. 12, v. 3, nos. 1-2, p. 125-138, illus., 1968.

98 **Briscoe, A. J.** Glaciers: Science, v. 162, no. 3852, p. 480-481, 1968.

97 **British Natl.Comm.Geodesy Geophysics.** United Kingdom contribution to the Upper Mantle Project—1967 Progress Report: London, Royal Society, 100 p., 1967.

269-319 **Britsyna, M. P.; Gorelov, S. K.; Meshcherskiy, I. N.** Osobennosti sovremennyk
tektonicheskikh dvizheniy yuzhnoy chasti Turkmenii po dannym povtornog
nivelirovaniya [Features of recent tectonic movements in the southern part of Turk
menia according to repeat leveling data]: Akad. Nauk SSSR Doklady, v. 179, no.
p. 1407-1410, illus., table, 1968.

275-398 **Broadbent, Carl D.** Slope stability program of Kennecott Copper Corporatio
Soc. Mining Engineers Trans., v. 244, no. 2, p. 209-217, illus., 1969.

Broadfoot, A. Lyle. *See* Belton, Michael J. S. 264-058

265-437 **Brock, A.** Drifting and rifting—A comment on the Tertiary rotation of Afric
Nature, v. 219, no. 5154, p. 599-600, table, 1968.

269-147 **Brock, B. B.** Crustal patterns related to the sphericity of heavenly bodies or stru
tural mosaic hierarchies on Mars, Earth and Moon, *in* Internat. Geol. Cong., 23
Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 11-25, illu
1968.

269-283 **Brock, Maurice R.** Terrestrial application of geological techniques developed f
manned lunar exploration, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Se
13, Other subjects: Prague, Academia, p. 127-130, 1968.

271-264 **Brockamp, B.; Pistor, P.** Ein Beitrag zur seismischen Erforschung der Struktu
des gronlandischen Inlandeises [Contribution to seismic investigation of the stru
ture of the Greenland inland ice (with English abs.)]: Polarforschung 1967, v. 6,
37, nos. 1-2, p. 133-146, illus., 1968.

274-157 **Brockamp, B.; Rüter, H.** Die Abhängigkeit der elastischen Parameter des Eis
vom hydrostatischen Druck bis zu 400 bar [The dependence of the elastic param
ters of ice on hydrostatic pressure to 400 bars (with English summ. and captions)
Zeitschr. Geophysik, v. 35, no. 3, p. 277-285, illus., tables, 1969.

268-547 **Brodov, L. U.; Khudobina, L. N.; Ginodman, A. I.; Kuznetsova, O. N.; Lebede
K. A.; Purzyrev, N. N.** Transverse waves and their geological application, *in* Interna
Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of appli
geophysics: Prague, Academia, p. 97-101, 1968.

Brodov, L. Yu. *See* Puzyrev, N. N. 269-634

Brodov, L. Yu. *See* Mayorov, V. V. 270-392

268-195 **Brodovoy, V. V.; Morozov, M. D.; Anashin, Yu. F.; Zhogolev, L. P.; Klichniko
V. A.; Matveyev, V. S.** Prospecting for buried ore deposits by means of combin
geological and geophysical methods, *in* Internat. Geol. Cong., 23d, Prague 196
Proc., Sec. 5, Geological Results of Applied Geophysics: Prague, Academia, p. 4
56, illus., 1968.

269-279 **Brodovoy, V. V.; Morozov, M. D.; Anashin, Yu F.; Zhogolev, L. P.; Klichnikov,
A.; Knizhnik, Ye. I.; Matveyey, V. S.** Poiski skrytykh rudnykh mestorozhdeniy ko
pleksom geologo-geofizicheskikh metodov [Prospecting for buried ore deposits by
combination of geologic and geophysical methods (with English summ.)], *in* Int
nat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob.
Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka,"
215-222, illus., 1968.

267-449 **Brodskaya, S. Yu.** Izmeneniye magnitnykh svoystv ferrimagnitnykh mineral
pod vozdeystviyem γ-oblucheniya [Change in the magnetic properties of ferrima
netic minerals under the action of gamma-irradiation]: Akad. Nauk SSSR Izv. Fizi
Zemli, no. 10, p. 57-63, illus., tables, 1968.

268-421 **Brodskaya, S. Yu.** Paleomagnetic research in the USSR, *in* The Earth and t
Universe: Springfield, Va., Federal Clearinghouse Sci. and Tech. Inf., p. 258-2

1968; translated from Russian, *in* Zemlya vo vselennoy: Moscow, Izdatel'stvo "MYSL," 1964.

5-653 **Brodskiy, A. Ya.** Ob odnom iz tipov voln, zaregistrirovannykh na yuzhnom sklone vala Karpinskogo pri seysmorazvedke MOV [On one of the types of waves recorded on the south flank of the Karpinskiy arch in seismic reflection surveying]: Razved. Geofizika, no. 24, p. 13-15, illus., 1967.

Brodskiy, P. A. *See* Komarov, S. G. 273-507

Bromery, R. W. *See* Kane, M. F. 272-203

Bromery, Randolph W. *See* Griscom, Andrew. 272-378

9-677 **Brooke, John; Gilbert, R. L. G.** The development of the Bedford Institute deep-sea drill: Deep-Sea Research, v. 15, no. 4, p. 483-490, illus., 1968.

6-003 **Brookins, Douglas G.** Rb-Sr age of the Ammonoosuc Volcanics, New England: Am. Jour. Sci., v. 266, no. 7, p. 605-608, illus., table, 1968.

0-005 **Brookins, Douglas G.** The significance of K-Ar dates on altered kimberlitic phlogopite from Riley County, Kansas: Jour. Geology, v. 77, no. 1, p. 102-107, illus., table, 1969.

1-025 **Brookins, Douglas G.** Rb-Sr and K-Ar age determinations from the Precambrian rocks of the Jardine-Crevice Mountain area, southwestern Montana: Earth Sci. Bull., v. 1, no. 2, p. 5-9, illus., tables, 1968.

Brookins, Douglas G. *See* Chaudhuri, Sambhudas. 273-004

3-001 **Brooks, C.; Wendt, I.; Harre, W.** A two-error regression treatment and its application to Rb-Sr and initial Sr-87/Sr-86 ratios of younger Variscan granitic rocks from the Schwarzwald massif, southwest Germany: Jour. Geophys. Research, v. 73, no. 18, p. 6071-6084, illus., tables, 1968.

Brooks, Harold K. *See* Bullen, Ripley P. 265-039

-285 **Brooks, J. A.** Rayleigh waves in southern New Guinea—[Pt.] 1, Higher mode group velocities: Seismol. Soc. America Bull., v. 59, no. 2, p. 945-958, illus., tables, 1969.

-205 **Brooks, Michael.** The geological results of gravity and magnetic surveys in the Malvern Hills and adjacent districts: Geol. Jour., v. 6, pt. 1, p. 13-30, illus., 1968.

Broome, P. *See* Plutchok, R. 275-126

-134 **Brosche, P.; Sündermann, J.** Gezeitenreibung und Erdrotation [Tidal friction and rotation of the Earth]: Naturwissenschaften, v. 56, no. 3, p. 135, 1969.

-210 **Brovar, V. V.; Ostach, O. M.** Issledovaniye dvukh sposobov resheniya zadachi Dirikhle [Investigation of two ways of solving the Dirichlet problem]: Vyssh. Ucheb. Zavedeniy Izv., Geodeziya i Aerofotos"yemka, no. 3, p. 85-89, 1968.

-322 **Brown, G. M.; Williams, W. R.** Some properties of the day-to-day variability of Sq(H): Planetary and Space Sci., v. 17, no. 3, p. 455-470, illus., table, 1969.

-028 **Brown, P. E.; Miller, J. A.; Grasty, R. L.** Isotopic ages of late Caledonian granitic intrusions in the British Isles: Yorkshire Geol. Soc. Proc., v. 36, pt. 3, p. 251-276, illus., tables, 1968.

-481 **Brown, Richard.** A seismic refraction study of Michigan's Upper Peninsula: Compass, v. 45, no. 1, p. 33-39, illus., tables, 1967.

266-269 **Brown, Robert D., Jr.; Wallace, Robert E.** Current and historic fault movement along the San Andreas fault between Paicines and Camp Dix, California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 22-39, illus., tables; discussion, p. 39-41, 1968.

Brown, Robert D., Jr. *See* Vedder, John G. 266-282

274-421 **Brown, Robert J. S.** Normal-moveout and velocity relations for flat and dipping beds and for long offsets: Geophysics, v. 34, no. 2, p. 180-196, illus., 1969.

Brown, W. E., Jr. *See* Muhleman, D. O. 268-082

Brown, W. E., Jr. *See* Muhleman, D. O. 275-075

Brown, W. L. *See* Lanzerotti, L. J. 265-385

266-175 **Browning, David G.; Thorp, William H.; McElroy, John D.** Velocity and temperature profiles in Lake Superior: Jour. Geophys. Research, v. 73, no. 18, p. 6122-6124, illus., 1968.

267-574 **Browning, David G.; Jones, Everett N.; Mellen, Robert H.; Thorp, William H.** Attenuation of low-frequency sound in fresh water: Science, v. 162, no. 3858, p. 1120-1121, illus., 1968.

269-088 **Brownlee, Donald E.; Hodge, Paul W.; Wright, Francis W.** Upper limits of the micron and submicron particle flux at satellite altitudes: Jour. Geophys. Research, v. 74, no. 3, p. 876-883, illus., 1969.

268-020 **Brueckner, H. K.; Wheeler, R. L.; Armstrong, R. L.** Rb-Sr isochron for older gneisses of the Tafjord area, basal gneiss region, southwestern Norway: Norsk Geol. Tidsskr., v. 48, nos. 1-2, p. 127-131, illus., table, 1968.

275-059 **Bruman, J. R.** A lunar libration point experiment: Icarus, v. 10, no. 2, p. 197-200, illus., 1969.

274-097 **Brune, James N.; Engen, Gladys R.** Excitation of mantle Love waves and definition of mantle wave magnitude: Seismol. Soc. America Bull., v. 59, no. 2, p. 923-933, illus., tables, 1969.

275-085 **Brune, James N.; Henyey, Thomas L.; Roy, Robert F.** Heat flow, stress, and rates of slip along the San Andreas fault, California: Jour. Geophys. Research, v. 74, no. 15, p. 3821-3827, illus., 1969.

Bryson, Reid A. *See* Bender, Margaret M. 265-032

Bryson, Reid A. *See* Bender, Margaret M. 271-019

269-412 **Bryunelli, B. Ye.; Lyatskaya, A. M.; Lyatskiy, V. B.** Interpretation of Pc3, 4 geomagnetic pulsations: Geomagnetism and Aeronomy, v. 8, no. 3, p. 428-431, illus., 1968.

271-515 **Buden, Jiří.** Die Ortung der Gebirgsschlagherde im Steinkohlrevier bei Kladno [The location of focuses of rock bursts in the Kladno coal district]: Freiberger Forschungshefte, C 225, p. 21-30, illus., table, 1967.

Bubnov, V. P. *See* Yakovlev, I. A. 265-251

264-535 **Buchan, S.; Dewes, F. C. D.; McCann, D. M.; Smith, D. Taylor.** Measurements of the acoustic and geotechnical properties of marine sediment cores, *in* Marine geotechnique—Internat. Research Conf., Monticello, Ill., 1966, Proc.: Urbana, Ill., Univ. Illinois Press, p. 65-92, illus., tables, 1967.

66-375 **Buchbinder, Goetz G. R.** Properties of the core-mantle boundary and observations of PcP: Jour. Geophys. Research, v. 73, no. 18, p. 5901-5923, illus., tables, 1968.

69-223 **Buchbinder, Goetz G. R.** Amplitude spectra of PcP and P phases: Seismol. Soc. America Bull., v. 58, no. 6, p. 1797-1819, illus., tables, 1968.

74-112 **Buchbinder, Goetz G. R.** Distance corrections for deep focus earthquakes: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 195-202, illus., tables, 1969.

56-052 **Buchwald, V. F.** Study of six iron meteorites—Babb's Mill, Follinge, Indian Valley, Netschaevo, Scottsville, and Seelasgen: Anatecta Geol., no. 2, 68 p., illus., tables, 1967.

70-030 **Buchwald, V. F.** Iron meteorites—Tables relating the Widmanstatten angles to the plane of section: Geochim. et Cosmochim. Acta, v. 33, no. 1, p. 152-153, illus., table, 1969.

74-038 **Buchwald, V. F.; Wasson, John T.** The two Colombian iron meteorites—Santa Rosa and Tocavita: Analecta Geol., no. 3, 29 p., illus., tables, 1968.

5-013 **Buckley, James D.; Trautman, Milton A.; Willis, Eric H.** ISOTOPES' radiocarbon measurements VI: Radiocarbon, v. 10, no. 2, p. 246-294, 1968.

1-007 **Buckley, James D.; Willis, Eric H.** ISOTOPES' radiocarbon measurements VII: Radiocarbon, v. 11, no. 1, p. 53-105, 1969.

Buckup, Klaus. *See* Schmeling, Renate. 266-567

6-568 **Buckup, Klaus.** Bohrlochgeophysikalische Messungen zur Kontrolle der unterirdischen Gasspeicherung in Aquiferhorizonten [Geophysical logging for controlling subterranean gas storage in aquifer horizons (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 6, p. 302-307, illus., 1968.

4-263 **Budanov, V. G.** O prichinak izmeneniya tseny deleniya kvartsevykh astazirovannykh gravimetrov [On the causes of variation of the scale division of quartz astatized gravimeters]: Razved. Geofizika, no. 23, p. 75-79, illus., 1967.

7-269 **Budanov, V. G.; Yevdokimov, Yu. S.** Rezul'taty etalonirovaniya shirokodiapazonnykh gravimetrov tipa GAK metodom naklona [Results of calibrating wide-range gravimeters of GAK type by the tilt method]: Razved. Geofizika, no. 26, p. 56-61, illus., tables, 1968.

Budanov, V. G. *See* Bagramyants, V. O. 268-280

7-467 **Bud'ko, V. M.** Kompleksnoye primeneniye aerometodov dlya geologicheskogo kartirovaniya na Kol'skom poluostrove [Joint use of airborne methods for geologic mapping on the Kola Peninsula]: Sovetskaya Geologiya, no. 6, p. 131-138, illus., 1968.

Budnikov, N. P. *See* Igrevskiy, V. I. 275-179

5-193 **Budnikov, N. P.; Dement'yeva, G. V.; Zubov, I. P.; Koznevnikov, I. I.; Mel'nik, I. M.; Solov'yev, B. A.; Shirokov, V. Ya.** Parametricheskoye bureniye v komplekse regional'nykh geologo-geofizicheskikh rabot [Parametric drilling in the program of regional geological and geophysical operations]: Geologiya Nefti i Gaza, no. 3, p. 8-10, table, 1969.

Bueller, Ivan I. *See* Badekas, John. 267-248

Bufe, Charles G. *See* Schimke, Gerald R. 266-292

Bufe, Charles G. *See* Schimke, Gerald R. 268-424

267-391 **Buffalano, Charles.** Dynamics of the Chapman-Ferraro model of the magnetosphere: Planetary and Space Sci., v. 16, no. 8, p. 1023-1034, illus., 1968.

Buffington, Edwin C. *See* Moore, David G. 265-286

Buffington, Edwin C. *See* Shepard, Francis P. 267-606

Buffington, Edwin C. *See* Scholl, David W. 269-680

264-061 **Buhl, David; Welch, William J.; Rea, Donald G.** Reradiation and thermal emission from illuminated craters on the lunar surface: Jour. Geophys. Research, v. 73, no. 16, p. 5281-5295, illus., 1968.

268-042 **Buhl, David; Welch, William J.; Rea, Donald G.** Anomalous cooling of a cratered lunar surface: Jour. Geophys. Research, v. 73, no. 24, p. 7593-7608, illus., 1968.

266-233 **Bukhnikashvili, A. V.; Dzhashi, G. G.; Khvitia, G. P.** Kawkasionis saḫrethi pherdis spilensz-pirotiniani zolis lukaluri eleḫtruli welebīs šesçawlis zogierthi sedegi kahethis pharglebsi [Some results of a study of the local electrical fields of the copper-pyrrhotite belt of the south flank of the Caucasus in the Kakhetia region (in Georgic with Russian summ.)]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 169-181, illus., 1966.

264-199 **Bulakh, Ye. G.; Loginov, V. Ye.** K voprosu o vybore nachal'nykh priblizheniy pri reshenii obratnykh zadach metodom skoreyshego spuska [On the problem of choice of initial approximations in solving the inverse problem by the method of *fastest drop* (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 28-31, illus., 1968.

267-238 **Bulanzhe, Yu. D.; Pevnev, A. K.** O kompleksnykh issledovaniyakh na statsionarnykh geofizicheskikh poligonakh [On combined investigations on stationary geophysical polygons], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 311-313, 1968.

Bulekbayev, Z. Ye. *See* Avrov, P. Ya. 269-661

265-254 **Bulgakov, Yu. I.; Velikin, A. B.** Metod perekhodnykh protsessov v induktivnoy elektrorazvedke s sovmeshchennymi istochnikom i priyemnikom polya [Method of transient processes in induction electrical surveying with integrated source and receiver of the field]: Geofiz. Apparatura, no. 27, p. 23-42, illus., 1966.

267-176 **Bulgakov, Yu. I.; Frantov, G. S.** Modelirovaniye peremennykh elektromagnitnykh poley, vozmushchayemykh elektroprovodnymi i magnitnymi ob"yektami [Modeling the variable electromagnetic fields generated by electrically conducting and magnetic objects]: Razved. i Okhrana Nedr, no. 8, p. 39-42, illus., 1968.

268-344 **Bulin, N. K.** Velichina parametra v_P:v_S v zemnoy kore pri nalichii osadochnogo aloya [Value of the parameter v_P:v_S in the Earth's crust in the presence of a sedimentary layer]: Prikladnaya Geofizika, no. 52, p. 73-82, illus., table, 1968.

269-469 **Bulina, L. V.** Struktura fundamenta yuzhnoy chasti Sibirskoy platformy [Structure of the basement of the southern part of the Siberian platform]: Sovetskaya Geologiya, no. 9, p. 108-112, illus., 1968.

270-062 **Bull, Colin; Marangunic, Cedomir.** Glaciological effects of debris slide on Sherman Glacier, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 309-317, illus., table, 1968.

Bull, Colin. *See* Marangunic, Cedomir. 270-067

269-300 **Bullard, E. C.** Conference on the history of the Earth's crust, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 231-235, 1968.

70-272 **Bullard, Edward C.** The Bakerian Lecture, 1967—Reversals of the Earth's magnetic field: Royal Soc. London Philos. Trans., ser. A, v. 263, no. 1143, p. 481-524, illus., tables, 1968.

64-295 **Bullen, K. E.** Dependence of compressibility and compression on chemical composition in finite-strain theory: Physics Earth and Planetary Interiors, v. 1, no. 4, p. 297-301, illus., table, 1968.

66-386 **Bullen, K. E.** Compression in the Earth: Royal Astron. Soc. Geophys. Jour., v. 16, no. 1, p. 31-36, illus., table, 1968.

68-328 **Bullen, K. E.** Empirical equations of state for the Earth's lower mantle and core: Royal Astron. Soc. Geophys. Jour., v. 16, no. 3, p. 235-238, table, 1968.

69-361 **Bullen, K. E.; Haddon, R. A. W.** Corrections to three Earth models: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 401-402, tables, 1968.

74-287 **Bullen, K. E.; Haddon, R. A. W.** Upper bound to change in incompressibility at the Earth's mantle-core boundary: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 179-183, 1969.

Bullen, K. E. *See* Haddon, R. A. W. 275-131

65-039 **Bullen, Ripley P.; Brooks, Harold K.** Two ancient Florida dugout canoes: Florida Acad. Sci. Quart. Jour., v. 30, no. 2, p. 97-107, illus., 1967 [1968].

74-431 **Bullerwell, W.; McQuillin, R.** Preliminary report on a seismic reflection survey in the southern Irish Sea, July 1968: [Great Britain] Inst. Geol. Sci. Rept., no. 69/2, 7 p., illus., 1969.

71-167 **Bulletin Géodésique.** Compte rendu résumé des séances de la section V, Géodesie physique [Summary report of the sessions of Section 5, Physical Geodesy]: Bull. Géod., no. 88, p. 191-197, 1968.

Bullitt, Orville H. *See* Rainey, Froelich G. 269-452

72-319 **Bullough, K.; Hughes, A. R. W.; Kaiser, T. R.** Satellite evidence for the generation of VLF emissions at medium latitude by the transverse resonance instability: Planetary and Space Sci., v. 17, no. 3, p. 363-374, illus., table, 1969.

57-088 **Bülo, K. V.** Seleno-geological evidence from Surveyor I, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 163-165, 1967.

Bunce, Elizabeth T. *See* Chase, Richard L. 271-177

58-032 **Bunch, T. E.; Olsen, Edward.** Potassium feldspar in Weekeroo Station, Kodaikanal, and Colomera iron meteorites: Science, v. 162, no. 3861, p. 1507-1508, 1968.

Bunch, T. E. *See* Short, N. M. 273-069

73-071 **Bunch, T. E.; Quaide, W. L.** Shatter cones in the Danny Boy nuclear crater, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 285, illus., 1968.

73-081 **Bunch, T. E.** Some characteristics of selected minerals from craters, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 413-432, illus., 1968.

73-087 **Bunch, T. E.; Cohen, Alvin J.; Dence, M. R.** Shock-induced structural disorder in plagioclase and quartz, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 509-518, illus., tables, 1968.

273-093 **Bunch, T. E.; Cassidy, William A.** Impact-induced deformation in the Campo del Cielo meteorite, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 601-612, illus., table, 1968.

267-129 **Bune, V. I.** Ob organizatsii rabot po sostavleniyu karty seysmicheskogo rayonirovaniya Evropy [On the organization of work on the compiling of the map of seismic zoning of Europe]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 114-116, 1968.

264-072 **Bunker, C. M.; Bush, C. A.; O'Connor, J. T.** A comparison of field and laboratory measurements of radium-equivalent uranium, thorium, and potassium by gamma-ray spectrometry, Ludlow, California: U.S. Geol. Survey Prof. Paper 600-C, p. C107-C112, illus., table, 1968.

Bun'kov, A. M. *See* Khalevin, N. I. 266-531

267-595 **Bun'kov, A. M.; Druzhinin, V. S.; Khalevin, N. I.** Ob izuchenii Tagil'skogo sinklinoriya Urala metodom prostranstvennykh seysmicheskikh zondirovaniy [On the study of the Tagil synclinorium of the Urals by the method of seismic spatial sounding], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 259-268, illus., 1968.

272-141 **Bur, T. R.; McWilliams, J. R.; Hjelmstad, K.** Velocity errors in cemented specimens: Internat. Jour. Rock Mechanics and Mining Sci., v. 6, no. 2, p. 203-209, illus., tables, 1969.

Bur, Thomas R. *See* Thill, Richard E. 271-116

274-369 **Burakov, K. S.** Magnitnyy kol'tsevoy modulyator [Magnetic ring modulator]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 116-117, illus., 1969.

Burchfiel, B. C. *See* Adams, J. A. S. 269-048

269-313 **Burchfiel, B. C.; Davis, G. A.** Two-sided nature of the Cordilleran orogen and its scenic tectonic implications, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 3, Orogenic belts: Prague, Academia, p. 175-184, illus., 1968.

265-030 **Burchuladze, A. A.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Tbilisi radiocarbon dates I: Radiocarbon, v. 10, no. 2, p. 466-467, 1968; originally published in Russian, 1966.

Burckle, Lloyd H. *See* Hays, James D. 275-329

268-650 **Burdin, Yu. B.** O razdel'nom kolichestvennom opredelenii tyazhelykh elementov v dvukhkomponentnykh sredakh metodom selektivnogo karotazha [On the separate quantitative determination of heavy elements in two-component mediums by the method of selective logging], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 29-36, illus., 1967.

Burdova, T. F. *See* Kondratovich, Yu. V. 270-389

266-211 **Bureau, Jean-Louis.** Sur une méthode de dépouillement magnétotellurique [On a method of magnetotelluric analysis]: Acad. Sci. Comptes Rendus, ser. B, v. 266, no. 17, p. 1173-1174, table, 1968.

269-242 **Bureau, Jean-Louis.** Sur une méthode de dépouillement magnétotellurique [On a method of magnetotelluric peeling]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 17, p. 1173-1174, table, 1968.

268-409 **Burek, P. J.** Korrelation reversmagnetisierter Gesteinsfolgen als stratigraphisches Hilfsmittel—aufgezeigt am Beispiel einer palaeomagnetischen Studie im Buntsandstein SW Deutschlands [Correlation of reversely magnetized rock series as a stratigraphic tool—illustrated by the example of a paleomagnetic study in the Buntsandstein of southwestern Germany], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 23-36, illus., 1968.

273-381 **Burek, Peter J.** Korrelation revers magnetisierter Gesteinsfolgen im Oberen Buntsandstein SW-Deutschlands [Correlation of reversely magnetized rock sequences in the Upper Buntsandstein of southwest Germany (with English and French summ.)]: Geol. Jahrb., v. 84, p. 591-616, illus., 1967.

Burford, Robert O. *See* Meister, Laurent J. 266-087

265-607 **Burg, John P.** Reply by author to discussion by Michael Schoenberger [1968]: Geophysics, v. 33, no. 4, p. 680, 1968.

264-204 **Burg, K. E.** Marine geodetic problems of industry and commerce, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 55-60, illus., 1967.

Burger, A. J. *See* vanNiekerk, C. B. 264-008

267-028 **Burger, A. J.; Hugo, P. J.; Strelow, F. W. E.** Radiometric dating of certain pegmatites in the Kenhardt and Gordonia Districts, Cape Province: South Africa Dept. Mines Geol. Survey Annals 1965, v. 4, p. 87-98, illus., table, 1968.

Burger, A. J. *See* vanNiekerk, C. B. 271-028

Burger, Aluyn J. *See* Besairie, Henri. 266-034

Burgess, A. *See* Russell, M. J. 274-235

266-290 **Burk, Creighton A.; Moores, Eldridge M.** Problems of major faulting at continental margins, with special reference to the San Andreas fault system, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 358-374, illus., 1968.

270-354 **Burke, K. B. S.** A seismic study of the surficial deposits in the Stenen area, Saskatchewan: Canada Geol. Survey Paper 68-60, 36 p., illus., table, 1968.

273-122 **Burke, Kevin.** Seismic areas of the Guinea coast where Atlantic fracture zones reach Africa: Nature, v. 222, no. 5194, p. 655-657, illus., 1969.

270-001 **Burke, W. H.; Otto, J. B.; Denison, R. E.** Potassium-argon dating of basaltic rocks: Jour. Geophys. Research, v. 74, no. 4, p. 1082-1086, illus., table, 1969.

Burke, William H., Jr. *See* Denison, Rodger E. 269-006

266-419 **Burlaga, L. F.; Ogilvie, K. W.** Observations of the magnetosheath-solar wind boundary: Jour. Geophys. Research, v. 73, no. 19, p. 6167-6178, illus., tables, 1968.

273-332 **Burlaga, L. F.; Ogilvie, K. W.** Causes of sudden commencements and sudden impulses: Jour. Geophys. Research, v. 74, no. 11, p. 2815-2825, illus., table, 1969.

271-357 **Burlatskaya, S. P.; Nechayeva, T. B.; Petrova, G. N.** Kharakternyye cherty vekovykh variatsiy geomagnitnogo polya po mirovym arkheomagnitnym dannym [Typical features of the secular variations of the geomagnetic field according to world archeomagnetic data]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 62-70, illus., 1968.

Burleigh, Richard. *See* Barker, Harold. 268-017

Burlingame, A. L. *See* Han, Jerry. 272-056

271-522 **Burmakov, Yu. A.; Oblogina, T. I.** Opredeleniye luchey i godografov refragirovannykh chislennymi metodami [Determination of the rays and traveltime curves of refracted waves by numerical methods]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 81-88, illus., 1968.

Burnett, D. S. *See* Bogard, D. D. 272-046

Burnett, D. S. *See* Bence, A. E. 274-034

267-209 **Burša, Milan.** Earth's flattening and harmonic coefficients of geopotential: Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. 3, p. 237-245 1968.

271-173 **Burša, Milan.** On the figure of the Earth's equipotential surface from satellite orbit dynamics: Československá Akad. Věd Studia Geophys. et Geod., v. 13, no. 1 p. 1-12, 1969.

272-219 **Burša, Milan.** On the determination of gravimetric deflections of the vertical for the centre area [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sbornik 1967, v. 15, p. 13-50, illus., tables, 1968.

273-341 **Burtis, W. J.; Helliwell, R. A.** Banded chorus—A new type of VLF radiation observed in the magnetosphere by OGO 1 and OGO 3: Jour. Geophys. Research, v. 74, no. 11, p. 3002-3010, illus., 1969.

271-022 **Burton, C. K.; Bignell, J. D.** Cretaceous-Tertiary events in southeast Asia: Geol. Soc. America Bull., v. 80, no. 4, p. 681-687, illus., tables, 1969.

Burtsev, Yu. A. *See* Bobrov, V. N. 269-417

Bur'yanov, V. B. *See* Krasovskiy, S. S. 266-246

Busche, Jack R. *See* Ehmann, William D. 275-042

266-049 **Buseck, Peter R.; Moore, Carleton, B.** A coarse octahedrite from Bloody Basin, Arizona: Arizona Acad. Sci. Jour., v. 4, no. 2, p. 67-70, illus., 1966.

274-032 **Buseck, Peter R.** Phosphide from meteorites—Barringerite, a new iron-nickel mineral: Science, v. 165, no. 3889, p. 169-171, illus., table, 1969.

Bush, C. A. *See* Bunker, C. M. 264-072

Bush, Darrell C. *See* Granberry, Raymond J. 272-538

Bush, Patricia A. *See* Lattimore, Robert K. 265-311

Bush, Sam A. *See* Lattimore, Robert K. 265-311

264-069 **Businger, Joost A.; Holton, James R.** Ice on Venus—Can it exist?: Science, v. 161, no. 3844, p. 915-916, 1968.

273-057 **Butkovich, T. R.** Gas equation of state of natural materials, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 83-85, table, 1968.

266-143 **Butovskaya, Ye. M.** Metodika i rezul'taty postroyeniya skorostnykh razrezov posledovatel'nymi priblizheniyami na primere nekotorykh rayonov Uzbekistana [Procedure and results of plotting velocity sections by successive approximations, illustrated by some regions of Uzbekistan]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 25-35, illus., tables, 1968.

269-373 **Butovskaya, Ye. M.; Gor'kovoy, O. P.; Pak, V. A.; Khamrabayev, I. Kh.** Nekotoryye rezul'taty izucheniya stroyeniya zemnoy kory v Vostochnom Uzbekistane po geofizicheskim dannym v svyazi s osobennosti yeye magmatizma i metallogenii

[Some results of study of crustal structure in East Uzbekistan according to geophysical data in connection with features of its magmatism and metallogeny (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 22-29, illus., 1968.

Buts'ko, Ye. A. *See* Sorokin, A. V. 267-472

268-158 **Butuzov, V. P.; Bezrukov, G. N.; Davydchenko, A. G.; Litvin, Yu. A.** Eksperimental'noye izucheniye raspredeleniya temperatury v rabochey kamere ustanovok vysokogo davleniya [Experimental study of the temperature distribution in the working chamber of high-pressure apparatus], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 119-123, illus., table, 1968.

269-287 **Buyalov, N. I.; Zabarinskiy, P. P.** Prakticheskoye rukovodstvo po poiskam i razvedke neftyanykh i gazovykh mestorozhdeniy [Practical handbook on the prospecting and exploration of oil and gas fields]: Moscow, Izdatel'stvo "Vysshaya Shkola," 165 p., illus., tables, 1967.

265-651 **Byakov, Yu. A.; Lapin, S. I.; Sharina, K. V.; Shilova, A. A.** Poyavleniye anizotropii skorostey uprugikh voln v otlozheniyakh Permskogo Prikam'ya [Manifestations of anisotropy of elastic wave velocities in the formations of the Kama region of the Perm district]: Neftegazovaya Geologiya i Geofizika, no. 6, p. 34-37, illus., tables, 1968.

266-089 **Byerlee, James D.; Brace, W. F.** Stick slip, stable sliding, and earthquakes—Effect of rock type, pressure, strain rate, and stiffness: Jour. Geophys. Research, v. 73, no. 18, p. 6031-6037, illus., table, 1968.

272-506 **Byerlee, James D.; Brace, William F.** High-pressure mechanical instability in rocks: Science, v. 164, no. 3880, p. 713-715, illus., 1969.

Byerly, Perry. *See* Dewey, James. 272-096

Bykov, R. I. *See* Kholin, A. I. 273-220

Bykovskiy, V. A. *See* Medvedev, S. V. 270-084

Caby, Renaud. *See* Allegre, Claude. 271-027

269-464 **Cadavid Camiña, S.; Hernández Fernández, M. E.** Estudio magnetométrico del basemento de la Hoja 583, Arganda [Magnetic study of the basement of Hoja 583, Arganda (with English abs.)]: Estudios Geol., v. 23, nos. 3-4, p. 263-275, illus., 1967.

274-461 **Cadle, R. D.; Lazrus, A. L.; Shedlovsky, J. P.** Comparison of particles in the fume from eruptions of Kilauea, Mayon, and Arenal volcanoes: Jour. Geophys. Research, v. 74, no. 13, p. 3372-3378, illus., tables, 1969.

274-014 **Cahen, L.; Ledent, D.; Pasteels, P.; Delhal, J.; Grögler, N.** Détermination d'âge sur des granites anciens (anté-Katangiens) et jeunes (Katangiens) du Copperbelt de Zambie et du Katanga sud-oriental – Note préliminaire [Age determination on some old (pre-Katangian) and young granites (Katangian) of the Zambia Copperbelt and of southeastern Katanga]: Soc. Géol. Belgique Annales, v. 91, pt. 3, p. 313-315, 1968.

268-201 **Cahierre, Loïc.** (Secrétaire Général). Rapport national sur les travaux français éxécutés de 1963 a 1966 – A l'occasion de la 14th Assemblée Générale de l'Union Géodésique et Géophysique Internationale [National report on French work executed from 1963 to 1966—On the 14th General Assembly of the International Union of Geodesy and Geophysics]: Paris, Comité National Français Géodésie et Géophysique, 357 p., illus., 1967.

Cahill, L. J., Jr. *See* Hoffman, R. A. 267-380

Cahill, L. J., Jr. *See* Sonnerup, B. U. O. 272-301

272-329 **Cahill, L. J., Jr.** Inflation model for the magnetic storm of April 17, 1965, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany 1967, Proc.: New York and Amsterdam, Reinhold Book Corp., p. 287-293, illus. 1968.

269-366 **Cailleux, Andre.** Anatomy of the Earth (translated from French): New York McGraw-Hill Book Co. (World University Library), 251 p., illus., tables, 1968.

Cain, J. Allen. *See* Banks, Philip O. 272-013

264-372 **Cain, J. C.; Langel, R. A.; Hendricks, S. J.** Magnetic chart of the Brazilian anomaly—A verification: Geomagnetism and Aeronomy, v. 8, no. 1, p. 84-87, illus. tables, 1968.

Cain, J. C. *See* Langel, R. A. 267-415

Cain, J. C. *See* Kahle, Anne B. 274-319

267-035 **Caine, N.** Carbon-14 dates from the Broad River Valley, Mt. Field National Park Tasmania: Australian Jour. Sci., v. 31, no. 3, p. 119-120, 1968.

Caldwell, R. L. *See* Givens, W. W. 270-479

Calero, Celso. *See* Nakagawa, Kyoji. 268-143

271-011 **Callow, W. J.; Hassall, Geraldine I.** National Physical Laboratory radiocarbo measurements VI: Radiocarbon, v. 11, no. 1, p. 130-136, 1969.

200-007 **Caloi, Pietro.** La zona di transizione fra Mantello e Nucleoterrestre — su stratificazione, sua probabile origine [The transition zone between the terrestria mantle and core — its stratification, its probable origin (with English summ.)]: Ac cad. Naz. Lincei Atti, Cl. Sci. Fis., Mat. e Nat. Rend., v. 42, no. 5, p. 573-579, illus 1967.

264-221 **Caloi, Pietro.** Sui fenomeni di anormale abbassamento del suolo, con particolar riguardo al delta Padano [On the phenomena of abnormal subsidence of the ground with particular regard to the Po Delta (with English summ.)]: Annali Geofisica, v. 20 no. 4, p. 331-400, illus., 1967.

265-187 **Caloi, Pietro; Spadea, M. C.** Sugli effetti delle esplosioni nelle rocce e sulle con seguente alterazioni del relativo campo elastico [On the effects of explosions in rock and on the consequent changes in the relative elastic field (with English summ.) Annali Geofisica, v. 19, no. 3, p. 335-359, illus., table, 1966.

265-622 **Caloi, Pietro; Spadea, M. C.** Principali risultati conseguiti durante l'osservazion geodinamica, opportunamente estesa nel tempo, di grandi dighe di sbarramento, loro giustificazioni teoriche [Principal results obtained during geodynamic observa tions of sufficiently long duration of large dams and their theoretical justificatio (with English summ.)]: Annali Geofisica, v. 19, no. 3, p. 261-286, illus., 1966.

266-189 **Caloi, Pietro.** L'equazione de Rayleigh e le onde di Somigliana—III, Le C_{ij} son onde di Somigliana—Loro importanza per lo studio della crosta terrestre [Th Rayleigh equations and the Somigliana waves—Pt. 3, C_{ij} are Somigliana waves— Their importance in the study of the Earth's crust (with English summ.)]: Accad Naz. Lincei Atti Cl. Sci. Fis., Mat. e Nat. Rend., v. 43, no. 6, p. 424-435, illus., tabl 1967.

266-387 **Caloi, Pietro.** La zona di transizione fra Mantello e Nucleo terrestre—su stratificazione, sua probabile origine [The transition zone between the terrestria mantle and core—its stratification, its probable origin (with English summ.)]: Accad Naz. Lincei Atti, Cl. Sci. Fis., Mat. e Nat. Rend., v. 42, no. 5, p. 573-579, illus., 1967

273-127 **Caloi, Pietro; Romualdi, G.** More on the Somigliana waves ($C_{i,j}$ and PL): Annali Geofisica, v. 21, no. 3, p. 239-264, illus., 1968.

Calvin, Melvin. *See* Han, Jerry. 272-056

268-200 **Camargo, Antonio.** Aproximación de funciones en el análisis de tendencias [Approximation of functions in trend analysis]: Asoc. Mexicana Geofísicos Explor. Bol., v. 8, no. 4, p. 179-201, illus., 1967.

265-122 **Cameli, G. M.** Contributo alla conoscenze sismo-tettoniche della regione istmica a Sud di Catanzaro [Contribution to seismotectonic knowledge of the isthmian region south of Catanzaro (with English summ.)]: Annali Geofisica, v. 19, no. 2, p. 243-258, illus., table, 1966.

269-056 **Cameron, J. F.** Survey of systems for concentration and low background counting of tritium in water, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 543-573, tables, 1967.

Cameron, R. E. *See* Horowitz, N. H. 274-049

268-540 **Campbell, David G.; Mackay, Sherman.** Bolsa Island nuclear power and desalting plant geologic investigations, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 157-175, illus., 1968.

Campbell, J. F. *See* Furumoto, Augustine S. 268-310

273-097 **Campbell, Malcolm J.; O'Leary, Brian T.; Sagan, Carl.** Moon—Two new mascon basins: Science, v. 164, no. 3885, p. 1273-1275, illus., 1969.

269-330 **Canada Dept.Energy,Mines Resources.** (Observatory Branch). Bouguer gravity anomaly map of Canada: Ottawa, Ontario, Canada Dept. Energy, Mines and Resources, 4 sheets, scale 1 in. to 40 mi., 1967.

200-008 **Canada Geological Survey.** Aeromagnetic series, Niddery Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4345, scale 1:63,360, 1968.

200-009 **Canada Geological Survey.** Aeromagnetic series, Sheets 76 0:5 and 76 O:6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4547, scale 1:63,360, 1968.

264-439 **Canada Geological Survey.** Aeromagnetic series, Shorts Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5207, scale 1:63,360, 1968.

264-440 **Canada Geological Survey.** Aeromagnetic series, Douglas Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5208, scale 1:63,360, 1968.

264-441 **Canada Geological Survey.** Aeromagnetic series, Merritt, British Columbia: Canada Geol. Survey Geophysics Paper 5209, scale 1:63,360, 1968.

264-442 **Canada Geological Survey.** Aeromagnetic series, Prospect Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5210, scale 1:63,360, 1968.

264-443 **Canada Geological Survey.** Aeromagnetic series, Spences Bridge, British Columbia: Canada Geol. Survey Geophysics Paper 5211, scale 1:63,360, 1968.

264-444 **Canada Geological Survey.** Aeromagnetic series, Mamit Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5212, scale 1:63,360, 1968.

264-445 **Canada Geological Survey.** Aeromagnetic series, Stump Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5213, scale 1:63,360, 1968.

264-446 **Canada Geological Survey.** Aeromagnetic series, Westwold, British Columbia: Canada Geol. Survey Geophysics Paper 5214, scale 1:63,360, 1968.

264-447 **Canada Geological Survey.** Aeromagnetic series, Monte Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5215, scale 1:63,360, 1968.

264-448 **Canada Geological Survey.** Aeromagnetic series, Kamloops, British Columbia: Canada Geol. Survey Geophysics Paper 5216, scale 1:63,360, 1968.

264-449 **Canada Geological Survey.** Aeromagnetic series, Cherry Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5217, scale 1:63,360, 1968.

264-450 **Canada Geological Survey.** Aeromagnetic series, Ashcroft, British Columbia: Canada Geol. Survey Geophysics Paper 5218, scale 1:63,360, 1968.

264-451 **Canada Geological Survey.** Aeromagnetic series, Cache Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5219, scale 1:63,360, 1968.

264-452 **Canada Geological Survey.** Aeromagnetic series, Tranquille River, British Columbia: Canada Geol. Survey Geophysics Paper 5220, scale 1:63,360, 1968.

264-453 **Canada Geological Survey.** Aeromagnetic series, Loon Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5221, scale 1:63,360, 1968.

264-454 **Canada Geological Survey.** Aeromagnetic series, Criss Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5222, scale 1:63,360, 1968.

264-455 **Canada Geological Survey.** Aeromagnetic series, Louis Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5223, scale 1:63,360, 1968.

264-456 **Canada Geological Survey.** Aeromagnetic series, Adams Plateau, British Columbia: Canada Geol. Survey Geophysics Paper 5320, scale 1:63,360, 1968.

264-457 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Glace Bay, Cape Breton Island, Nova Scotia: Canada Geol. Survey Geophysics Paper 228, 2d edition, scale 1:63,360, 1968; originally published 1955.

264-458 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Louisbourg, Cape Breton Island, Nova Scotia: Canada Geol. Survey Geophysics Paper 232, 2d edition, scale 1:63,360, 1968; originally published 1855.

264-459 **Canada Geological Survey.** Ship magnetometer series, Sheet 11 G/12, Scotian Shelf: Canada Geol. Survey Geophysics Paper 5343, scale 1:63,360, 1968.

264-460 **Canada Geological Survey.** Ship magnetometer series, Sheet 11 G/14, Scotian Shelf: Canada Geol. Survey Geophysics Paper 5344, scale 1:63,360, 1968.

264-461 **Canada Geological Survey.** Ship magnetometer series, Burgeo Bank: Canada Geol. Survey Geophysics Paper 5345, scale 1:126,720, 1968.

264-462 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Shelburne, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7030, scale 1:253,440, 1968.

264-463 **Canada Geological Survey.** Aeromagnetic series, Annapolis, Nova Scotia: Canada Geol. Survey Geophysics Paper 7032, scale 1:253,440, 1968.

264-464 **Canada Geological Survey.** Aeromagnetic series, Truro, Nova Scotia: Canada Geol. Survey Geophysics Paper 7035, scale 1:253,440, 1968.

264-465 **Canada Geological Survey.** Aeromagnetic series, Sydney, Nova Scotia-Prince Edward Island: Canada Geol. Survey Geophysics Paper 7038, scale 1:253,440, 1968.

264-466 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Yarmouth, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7291, scale 1:253,440, 1968.

264-467 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Sable Island Bank East, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7313, scale 1:253,440, 1968.

264-468 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Sable Island Bank West, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7314, scale 1:253,440, 1968.

264-469 **Canada Geological Survey.** Ship magnetometer series, Sheet 1D, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7317, scale 1:253,440, 1968.

264-470 **Canada Geological Survey.** Ship magnetometer series, The Stone Fence, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7318, scale 1:253,440, 1968.

264-471 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Banquereau, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7319, scale 1:253,440, 1968.

264-472 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Middle Bank, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7320, scale 1:253,440, 1968.

264-473 **Canada Geological Survey.** Ship magnetometer and aeromagnetic series, Misaine Bank, Scotian Shelf: Canada Geol. Survey Geophysics Paper 7324, scale 1:253,440, 1968.

264-474 **Canada Geological Survey.** Ship magnetometer series, Grand Bank: Canada Geol. Survey Geophysics Paper 8187, scale 1:253,440, 1968.

264-475 **Canada Geological Survey.** Ship magnetometer series, Virgin Rocks: Canada Geol. Survey Geophysics Paper 8188, scale 1:253,440, 1968.

264-476 **Canada Geological Survey.** Ship magnetometer series, east half 1 0 and west half 1 P: Canada Geol. Survey Geophysics Paper 8189, scale 1:253,440, 1968.

265-476 **Canada Geological Survey.** Aeromagnetic series, Tikerarsuk Point, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4727, scale 1:63,360, 1968.

265-477 **Canada Geological Survey.** Aeromagnetic series, Eqe Bay, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4728, scale 1:63,360, 1968.

265-478 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 H/4, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4738, scale 1:63,360, 1968.

265-479 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/13, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4739, scale 1:63,360, 1968.

65-480 **Canada Geological Survey.** Aeromagnetic series, Rimrock Lake, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4740, scale 1:63,360, 1968.

65-481 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/5, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4741, scale 1:63,360, 1968.

265-482 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/4, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4742, scale 1:63,360, 1968.

265-483 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/13, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4743, scale 1:63,360, 1968.

265-484 **Canada Geological Survey.** Aeromagnetic series, Lake Gillian North, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4744, scale 1:63,360, 1968.

265-485 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/5, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4745, scale 1:63,360, 1968.

265-486 **Canada Geological Survey.** Aeromagnetic series, Ipivtik Lake, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4746, scale 1:63,360, 1968.

265-487 **Canada Geological Survey.** Aeromagnetic series, Omega Bay, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4747, scale 1:63,360, 1968.

265-488 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 H/3, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4748, scale 1:63,360, 1968.

265-489 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/14, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4749, scal 1:63,360, 1968.

265-490 **Canada Geological Survey.** Aeromagnetic series, Nivalis Lake, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4750, scal 1:63,360, 1968.

265-491 **Canada Geological Survey.** Aeromagnetic series, Lewis Glacier, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4751, scal 1:63,360, 1968.

265-492 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/3, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4752, scal 1:63,360, 1968.

265-493 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/14, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4753, scal 1:63,360, 1968.

265-494 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/11, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4754, scal 1:63,360, 1968.

265-495 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/6, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4755, sca 1:63,360, 1968.

265-496 **Canada Geological Survey.** Aeromagnetic series, Piling Lake, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4756, sca 1:63,360, 1968.

265-497 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/2, District o Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4757, sca 1:63,360, 1968.

65-498 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/7, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4758, scale 1:63,360, 1968.

65-499 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/10, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4759, scale 1:63,360, 1968.

65-500 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/15, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4760, scale 1:63,360, 1968.

65-501 **Canada Geological Survey.** Aeromagnetic series, Barnes Ice Cap, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4761, scale 1:63,360, 1968.

5-502 **Canada Geological Survey.** Aeromagnetic series, Bieler Lake West, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4762, scale 1:63,360, 1968.

5-503 **Canada Geological Survey.** Aeromagnetic series, Conn Lake, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4763, scale 1:63,360, 1968.

5-504 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/15, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4764, scale 1:63,360, 1968.

5-505 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/9, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4765, scale 1:63,360, 1968.

5-506 **Canada Geological Survey.** Aeromagnetic series, Bieler Lake East, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4766, scale 1:63,360, 1968.

5-507 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 E/1, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4767, scale 1:63,360, 1968.

5-508 **Canada Geological Survey.** Aeromagnetic series, Gee Lake West, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4768, scale 1:63,360, 1968.

5-509 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/9, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4769, scale 1:63,360, 1968.

5-510 **Canada Geological Survey.** Aeromagnetic series, Flyaway Lake, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4770, scale 1:63,360, 1968.

5-511 **Canada Geological Survey.** Aeromagnetic series, Sheet 37 D/1, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4771, scale 1:63,360, 1968.

5-512 **Canada Geological Survey.** Aeromagnetic series, Sheet 27 C/5, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4773, scale 1:63,360, 1968.

5-513 **Canada Geological Survey.** Aeromagnetic series, Generator Lake, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4774, scale 1:63,360, 1968.

265-514 **Canada Geological Survey.** Aeromagnetic series, Sam Ford River, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4775, scale 1:63,360, 1968.

265-515 **Canada Geological Survey.** Aeromagnetic series, Sheet 27 F/4, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 4776, scale 1:63,360, 1968.

265-516 **Canada Geological Survey.** Aeromagnetic series, Saint-Modeste, Quebec: Canada Geol. Survey Geophysics Paper 4932, scale 1:63,360, 1968.

265-517 **Canada Geological Survey.** Aeromagnetic series, Trois-Pistoles, Quebec: Canada Geol. Survey Geophysics Paper 4933, scale 1:63,360, 1968.

265-518 **Canada Geological Survey.** Aeromagnetic series, Les Escoumins, Quebec: Canada Geol. Survey Geophysics Paper 4934, scale 1:63,360, 1968.

265-519 **Canada Geological Survey.** Aeromagnetic series, Saint-Paul-du-Nord, Quebec: Canada Geol. Survey Geophysics Paper 4935, scale 1:63,360, 1968.

265-520 **Canada Geological Survey.** Aeromagnetic series, Lac Cassette, Quebec: Canada Geol. Survey Geophysics Paper 4936, scale 1:63,360, 1968.

265-521 **Canada Geological Survey.** Aeromagnetic series, Lac Lessard, Quebec: Canada Geol. Survey Geophysics Paper 4937, scale 1:63,360, 1968.

265-522 **Canada Geological Survey.** Aeromagnetic series, Lac le Barbier, Quebec: Canada Geol. Survey Geophysics Paper 4938, scale 1:63,360, 1968.

265-523 **Canada Geological Survey.** Aeromagnetic series, Lac Sedillot, Quebec: Canada Geol. Survey Geophysics Paper 4939, scale 1:63,360, 1968.

265-524 **Canada Geological Survey.** Aeromagnetic series, Lac Carteret, Quebec: Canada Geol. Survey Geophysics Paper 4940, scale 1:63,360, 1968.

265-525 **Canada Geological Survey.** Aeromagnetic series, Rimouski, Quebec: Canada Geol. Survey Geophysics Paper 4952, scale 1:63,360, 1968.

265-526 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 C/10, Quebec: Canada Geol. Survey Geophysics Paper 4953, scale 1:63,360, 1968.

265-527 **Canada Geological Survey.** Aeromagnetic series, Betsiamites, Quebec: Canada Geol. Survey Geophysics Paper 4954, scale 1:63,360, 1968.

265-528 **Canada Geological Survey.** Aeromagnetic series, Lac Nipi, Quebec: Canada Geol. Survey Geophysics Paper 4955, scale 1:63,360, 1968.

265-529 **Canada Geological Survey.** Aeromagnetic series, Lac au Loup-Marin, Quebec: Canada Geol. Survey Geophysics Paper 4956, scale 1:63,360, 1968.

265-530 **Canada Geological Survey.** Aeromagnetic series, Lac Varin, Quebec: Canada Geol. Survey Geophysics Paper 4957, scale 1:63,360, 1968.

265-531 **Canada Geological Survey.** Aeromagnetic series, Riviere Vallant, Quebec: Canada Geol. Survey Geophysics Paper 4958, scale 1:63,360, 1968.

265-532 **Canada Geological Survey.** Aeromagnetic series, Mont-Joli, Quebec: Canada Geol. Survey Geophysics Paper 4969, scale 1:63,360, 1968.

265-533 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 C/16, Quebec: Canada Geol. Survey Geophysics Paper 4970, scale 1:63,360, 1968.

265-534 **Canada Geological Survey.** Aeromagnetic series, Baie-Comeau, Quebec: Canada Geol. Survey Geophysics Paper 4971, scale 1:63,360, 1968.

265-535 **Canada Geological Survey.** Aeromagnetic series, Lac Castelnau, Quebec: Canada Geol. Survey Geophysics Paper 4972, scale 1:63,360, 1968.

265-536 **Canada Geological Survey.** Aeromagnetic series, Lac Miquelon, Quebec: Canada Geol. Survey Geophysics Paper 4973, scale 1:63,360, 1968.

265-537 **Canada Geological Survey.** Aeromagnetic series, Lac Amariton, Quebec: Canada Geol. Survey Geophysics Paper 4974, scale 1:63,360, 1968.

265-538 **Canada Geological Survey.** Aeromagnetic series, Sayabec, Quebec: Canada Geol. Survey Geophysics Paper 4985, scale 1:63,360, 1968.

265-539 **Canada Geological Survey.** Aeromagnetic series, Matane, Quebec: Canada Geol. Survey Geophysics Paper 4986, scale 1:63,360, 1968.

265-540 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/4, Quebec: Canada Geol. Survey Geophysics Paper 4987, scale 1:63,360, 1968.

65-541 **Canada Geological Survey.** Aeromagnetic series, Godbout, Quebec: Canada Geol. Survey Geophysics Paper 4988, scale 1:63,360, 1968.

65-542 **Canada Geological Survey.** Aeromagnetic series, Riviere Godbout, Quebec: Canada Geol. Survey Geophysics Paper 4989, scale 1:63,360, 1968.

65-543 **Canada Geological Survey.** Aeromagnetic series, Lac Georgette, Quebec: Canada Geol. Survey Geophysics Paper 4990, scale 1:63,360, 1968.

65-544 Canada Geological Survey. Aeromagnetic series, Sainte-Félicité, Quebec: Canada Geol. Survey Geophysics Paper 5002, scale 1:63,360, 1968.

65-545 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/3, Quebec: Canada Geol. Survey Geophysics Paper 5003, scale 1:63,360, 1968.

65-546 **Canada Geological Survey.** Aeromagnetic series, Baie-Trinite, Quebec: Canada Geol. Survey Geophysics Paper 5004, scale 1:63,360, 1968.

65-547 **Canada Geological Survey.** Aeromagnetic series, Petite Riviere de la Trinite, Quebec: Canada Geol. Survey Geophysics Paper 5005, scale 1:63,360, 1968.

65-548 **Canada Geological Survey.** Aeromagnetic series, Rivière Pentecôte, Quebec: Canada Geol. Survey Geophysics Paper 5006, scale 1:63,360, 1968.

65-549 **Canada Geological Survey.** Aeromagnetic series, Cap-Chat, Quebec: Canada Geol. Survey Geophysics Paper 5019, scale 1:63,360, 1968.

5-550 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/7, Quebec: Canada Geol. Survey Geophysics Paper 5020, scale 1:63,360, 1968.

5-551 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/10, Quebec: Canada Geol. Survey Geophysics Paper 5021, scale 1:63,360, 1968.

5-552 **Canada Geological Survey.** Aeromagnetic series, Pointe Jambon, Quebec: Canada Geol. Survey Geophysics Paper 5022, scale 1:63,360, 1968.

5-553 **Canada Geological Survey.** Aeromagnetic series, Escuminac, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5031, scale 1:63,360, 1968.

5-554 **Canada Geological Survey.** Aeromagnetic series, Sainte-Anne-des Monts, Quebec: Canada Geol. Survey Geophysics Paper 5035, scale 1:63,360, 1968.

5-555 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/8, Quebec: Canada Geol. Survey Geophysics Paper 5036, scale 1:63,360, 1968.

5-556 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/9, Quebec: Canada Geol. Survey Geophysics Paper 5037, scale 1:63,360, 1968.

265-557 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 G/16, Quebec: Canada Geol. Survey Geophysics Paper 5038, scale 1:63,360, 1968.

265-558 **Canada Geological Survey.** Aeromagnetic series, Pointe Verte, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5047, scale 1:63,360, 1968.

265-559 **Canada Geological Survey.** Aeromagnetic series, New Richmond, Quebec: Canada Geol. Survey Geophysics Paper 5048, scale 1:63,360, 1968.

265-560 **Canada Geological Survey.** Aeromagnetic series, Lac McKay, Quebec: Canada Geol. Survey Geophysics Paper 5049, scale 1:63,360, 1968.

265-561 **Canada Geological Survey.** Aeromagnetic series, Deville, Quebec: Canada Geol. Survey Geophysics Paper 5050, scale 1:63,360, 1968.

265-562 **Canada Geological Survey.** Aeromagnetic series, Lac Madeleine, Quebec: Canada Geol. Survey Geophysics Paper 5051, scale 1:63,360, 1968.

265-563 **Canada Geological Survey.** Aeromagnetic series, Mont-Louis, Quebec: Canada Geol. Survey Geophysics Paper 5052, scale 1:63,360, 1968.

265-564 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/5, Quebec: Canada Geol. Survey Geophysics Paper 5053, scale 1:63,360, 1968.

265-565 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/12, Quebec: Canada Geol. Survey Geophysics Paper 5054, scale 1:63,360, 1968.

265-566 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/13, Quebec: Canada Geol. Survey Geophysics Paper 5055, scale 1:63,360, 1968.

265-567 **Canada Geological Survey.** Aeromagnetic series, Grande-Anse, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5064, scale 1:63,360, 1968.

265-568 **Canada Geological Survey.** Aeromagnetic series, New Carlisle, Quebec: Canada Geol. Survey Geophysics Paper 506, scale 1:63,360, 1968.

265-569 **Canada Geological Survey.** Aeromagnetic series, Honorat, Quebec: Canada Geol. Survey Geophysics Paper 5066, scale 1:63,360, 1968.

265-570 **Canada Geological Survey.** Aeromagnetic series, Mont Alexandre, Quebec: Canada Geol. Survey Geophysics Paper 5067, scale 1:63,360, 1968.

265-571 **Canada Geological Survey.** Aeromagnetic series, Lac York, Quebec: Canada Geol. Survey Geophysics Paper 5068, scale 1:63,360, 1968.

265-572 **Canada Geological Survey.** Aeromagnetic series, Grande-Vallée, Quebec: Canada Geol. Survey Geophysics Paper 5069, scale 1:63,360, 1968.

265-573 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/6, Quebec: Canada Geol. Survey Geophysics Paper 5070, scale 1:63,360, 1968.

265-574 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/11, Quebec: Canada Geol. Survey Geophysics Paper 5071, scale 1:63,360, 1968.

265-575 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/14, Quebec: Canada Geol. Survey Geophysics Paper 5072, scale 1:63,360, 1968.

265-576 **Canada Geological Survey.** Aeromagnetic series, Caraquet, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5081, scale 1:63,360, 1968.

265-577 **Canada Geological Survey.** Aeromagnetic series, Port Daniel, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5082, scale 1:63,360, 1968.

265-578 **Canada Geological Survey.** Aeromagnetic series, Chandler, Quebec: Canada Geol. Survey Geophysics Paper 5083, scale 1:63,360, 1968.

65-579 **Canada Geological Survey.** Aeromagnetic series, Sainte-Gabriel-De-Gaspe, Quebec: Canada Geol. Survey Geophysics Paper 5084, scale 1:63,360, 1968.

65-580 **Canada Geological Survey.** Aeromagnetic series, Sunny Bank, Quebec: Canada Geol. Survey Geophysics Paper 5085, scale 1:63,360, 1968.

65-581 **Canada Geological Survey.** Aeromagnetic series, Cloridorme, Quebec: Canada Geol. Survey Geophysics Paper 5086, scale 1:63,360, 1968.

65-582 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/7, Quebec: Canada Geol. Survey Geophysics Paper 5087, scale 1:63,360, 1968.

65-583 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/10, Quebec: Canada Geol. Survey Geophysics Paper 5088, scale 1:63,360, 1968.

65-584 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/15, Quebec: Canada Geol. Survey Geophysics Paper 5089, scale 1:63,360, 1968.

65-585 **Canada Geological Survey.** Aeromagnetic series, Miscou Island, New Brunswick: Canada Geol. Survey Geophysics Paper 5098, scale 1:63,360, 1968.

65-586 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 A/1, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 5099, scale 1:63,360, 1968.

65-587 **Canada Geological Survey.** Aeromagnetic series, Cap D'espoir, Quebec: Canada Geol. Survey Geophysics Paper 5100, scale 1:63,360, 1968.

65-588 **Canada Geological Survey.** Aeromagnetic series, Percé, Quebec: Canada Geol. Survey Geophysics Paper 5101, scale 1:63,360, 1968.

65-589 **Canada Geological Survey.** Aeromagnetic series, Gaspé, Quebec: Canada Geol. Survey Geophysics Paper 5102, scale 1:63,360, 1968.

65-590 **Canada Geological Survey.** Aeromagnetic series, Petit-Cap, Quebec: Canada Geol. Survey Geophysics Paper 5103, scale 1:63,360, 1968.

65-591 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 H/8, Quebec: Canada Geol. Survey Geophysics Paper 5104, scale 1:63,360, 1968.

65-592 **Canada Geological Survey.** Aeromagnetic series, Rivière aux Becs-Scies, Quebec: Canada Geol. Survey Geophysics Paper 5105, scale 1:63,360, 1968.

65-593 **Canada Geological Survey.** Aeromagnetic series, Port-Menier, Quebec: Canada Geol. Survey Geophysics Paper 5106, scale 1:63,360, 1968.

66-495 **Canada Geological Survey.** Aeromagnetic series, Kapuskasing, Districts of Algoma and Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7100, scale 1:253,440, 1968.

66-496 **Canada Geological Survey.** Aeromagnetic series, Hornepayne, Districts of Algoma, Thunder Bay and Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7101, scale 1:253,440, 1968.

66-497 **Canada Geological Survey.** Aeromagnetic series, Smoky Falls, District of Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7118, scale 1:253,440, 1968.

6-498 **Canada Geological Survey.** Aeromagnetic series, Kenogami River, District of Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7119, scale 1:253,440, 1968.

6-499 **Canada Geological Survey.** Aeromagnetic series, Ghost River, Districts of Kenora and Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7127, scale 1:253,440, 1968.

266-500 **Canada Geological Survey.** Aeromagnetic series, Ogoki, Districts of Kenora and Cochrane, Ontario: Canada Geol. Survey Geophysics Paper 7264, scale 1:253,440, 1968.

267-479 **Canada Geological Survey.** Aeromagnetic series, Reeb Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3766, scale 1:63,360, 1968.

267-480 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 H/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3767, scale 1:63,360, 1968.

267-481 **Canada Geological Survey.** Aeromagnetic series, Kasabonika Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3768, scale 1:63,360, 1968.

267-482 **Canada Geological Survey.** Aeromagnetic series, Frog River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3769, scale 1:63,360, 1968.

267-483 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3770, scale 1:63,360, 1968.

267-484 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3771, scale 1:63,360, 1968.

267-485 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3772, scale 1:63,360, 1968.

267-486 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3773, scale 1:63,360, 1968.

267-487 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3774, scale 1:63,360, 1968.

267-488 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3775, scale 1:63,360, 1968.

267-489 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3776, scale 1:63,360, 1968.

267-490 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3777, scale 1:63,360, 1968.

267-491 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3778, scale 1:63,360, 1968.

267-492 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3779, scale 1:63,360, 1968.

267-493 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3780, scale 1:63,360, 1968.

267-494 **Canada Geological Survey.** Aeromagnetic series, West, Penn Island, Kenora and Winnipeg mining districts, Ontario-Manitoba: Canada Geol. Survey Geophysics Paper 3781, scale 1:63,360, 1968.

267-495 **Canada Geological Survey.** Aeromagnetic series, Wapikopa River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3782, scale 1:63,360, 1968.

267-496 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 H/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3783, scale 1:63,360, 1968.

267-497 **Canada Geological Survey.** Aeromagnetic series, Shibogama Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3784, scale 1:63,360, 1968.

267-498 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 H/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3785, scale 1:63,360, 1968.

267-499 **Canada Geological Survey.** Aeromagnetic series, Ghost Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3786, scale 1:63,360, 1968.

267-500 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3787, scale 1:63,360, 1968.

267-501 **Canada Geological Survey.** Aeromagnetic series, Fat River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3788, scale 1:63,360, 1968.

267-502 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 I/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3789, scale 1:63,360, 1968.

267-503 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/1, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3790, scale 1:63,360, 1968.

267-504 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3791, scale 1:63,360, 1968.

267-505 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/9, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3792, scale 1:63,360, 1968.

67-506 **Canada Geological Survey.** Aeromagnetic series, Sheet 53 P/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3793, scale 1:63,360, 1968.

67-507 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/1, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3794, scale 1:63,360, 1968.

67-508 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3795, scale 1:63,360, 1968.

67-509 **Canada Geological Survey.** Aeromagnetic series, Sheet 54 A/9, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3796, scale 1:63,360, 1968.

67-510 **Canada Geological Survey.** Aeromagnetic series, Tabasokwia Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3797, scale 1:63,360, 1968.

67-511 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3798, scale 1:63,360, 1968.

267-512 **Canada Geological Survey.** Aeromagnetic series, Straight Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3799, scale 1:63,360, 1968.

267-513 **Canada Geological Survey.** Aeromagnetic series, Sourdough Rapids, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3800, scale 1:63,360, 1968.

267-514 **Canada Geological Survey.** Aeromagnetic series, Muzhikoba Creek, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3801, scale 1:63,360, 1968.

267-515 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3802, scale 1:63,360, 1968.

267-516 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/12, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3803, scale 1:63,360, 1968.

267-517 **Canada Geological Survey.** Aeromagnetic series, Burning River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3804, scale 1:63,360, 1968.

267-518 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/4, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3805, scale 1:63,360, 1968.

267-519 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3806, scale 1:63,360, 1968.

267-520 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/12, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3807, scale 1:63,360, 1968.

267-521 **Canada Geological Survey.** Aeromagnetic series, Fort Severn, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3808, scale 1:63,360, 1968.

267-522 **Canada Geological Survey.** Aeromagnetic series, Partridge Island and part of Sheet 44 D/3, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3809, scale 1:63,360, 1968.

267-523 **Canada Geological Survey.** Aeromagnetic series, Sheet 44 D/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3810, scale 1:63,360, 1968.

267-524 **Canada Geological Survey.** Aeromagnetic series, Lastcedar Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3811, scale 1:63,360, 1968.

267-525 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/6, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3812, scale 1:63,360, 1968.

267-526 **Canada Geological Survey.** Aeromagnetic series, Tashka Rapids, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3813, scale 1:63,360, 1968.

267-527 **Canada Geological Survey.** Aeromagnetic series, Meggisi Creek, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3814, scale 1:63,360, 1968.

267-528 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/3, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3815, scale 1:63,360, 1968.

267-529 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/6, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3816, scale 1:63,360, 1968.

267-530 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/11, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3817, scale 1:63,360, 1968.

267-531 **Canada Geological Survey.** Aeromagnetic series, Pikwakibud Creek, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3818, scale 1:63,360, 1968.

267-532 **Canada Geological Survey.** Aeromagnetic series, Shagamu Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3819, scale 1:63,360, 1968.

267-533 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/6, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3820, scale 1:63,360, 1968.

267-534 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/11, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3821, scale 1:63,360, 1968.

267-535 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/14, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3822, scale 1:63,360, 1968.

267-536 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/4, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3857, scale 1:63,360, 1968.

267-537 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3858, scale 1:63,360, 1968.

267-538 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/12, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3859, scale 1:63,360, 1968.

267-539 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/13, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3860, scale 1:63,360, 1968.

267-540 **Canada Geological Survey.** Aeromagnetic series, Shamattawa Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3861, scale 1:63,360, 1968.

267-541 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 K/5, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3862, scale 1:63,360, 1968.

267-542 **Canada Geological Survey.** Aeromagnetic series, Maminiska River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3863, scale 1:63,360, 1968.

267-543 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 K/13, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3864, scale 1:63,360, 1968.

267-544 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 N/4, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3865, scale 1:63,360, 1968.

267-545 **Canada Geological Survey.** Aeromagnetic series, Gooseberry Brook, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3866, scale 1:63,360, 1968.

267-546 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 N/12, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3867, scale 1:63,360, 1968.

267-547 **Canada Geological Survey.** Aeromagnetic series, Cultus Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4326, scale 1:63,360, 1968.

267-548 **Canada Geological Survey.** Aeromagnetic series, Gladstone Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4327, scale 1:63,360, 1968.

267-549 **Canada Geological Survey.** Aeromagnetic series, Talbot Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4328, scale 1:63,360, 1968.

267-550 **Canada Geological Survey.** Aeromagnetic series, Rhyolite Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4329, scale 1:63,360, 1968.

267-551 **Canada Geological Survey.** Aeromagnetic series, Klaza River, Yukon Territory: Canada Geol. Survey Geophysics Paper 4330, scale 1:63,360, 1968.

267-552 **Canada Geological Survey.** Aeromagnetic series, Apex Mountain, Yukon Territory: Canada Geol. Survey Geophysics Paper 4331, scale 1:63,360, 1968.

267-553 **Canada Geological Survey.** Aeromagnetic series, Selwyn River, Yukon Territory: Canada Geol. Survey Geophysics Paper 4332, scale 1:63,360, 1968.

267-554 **Canada Geological Survey.** Aeromagnetic series, Cripple Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4333, scale 1:63,360, 1968.

267-555 **Canada Geological Survey.** Aeromagnetic series, Pyroxene Mountain, Yukon Territory: Canada Geol. Survey Geophysics Paper 4334, scale 1:63,360, 1968.

267-556 **Canada Geological Survey.** Aeromagnetic series, Rosebud Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4335, scale 1:63,360, 1968.

267-557 **Canada Geological Survey.** Aeromagnetic series, Australia Mountain, Yukon Territory: Canada Geol. Survey Geophysics Paper 4336, scale 1:63,360, 1968.

267-558 **Canada Geological Survey.** Aeromagnetic series, Medrick Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4337, scale 1:63,360, 1968.

267-559 **Canada Geological Survey.** Aeromagnetic series, Lee Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4338, scale 1:63,360, 1968.

267-560 **Canada Geological Survey.** Aeromagnetic series, Upper Klondike River, Yukon Territory: Canada Geol. Survey Geophysics Paper 4339, scale 1:63,360, 1968.

267-561 **Canada Geological Survey.** Aeromagnetic series, Asheweig River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 7271, scale 1:253,440, 1968.

267-562 **Canada Geological Survey.** Aeromagnetic series, Fawn River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 7278, scale 1:253,440, 1968.

267-563 **Canada Geological Survey.** Aeromagnetic series, Dickey River, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 7284, scale 1:253,440, 1968.

268-445 **Canada Geological Survey.** Aeromagnetic series, Lac du Bonnet, Manitoba: Canada Geol. Survey Geophysics Paper 4094, scale 1:63,360, 1968.

268-446 **Canada Geological Survey.** Aeromagnetic series, Pine Falls, Manitoba: Canada Geol. Survey Geophysics Paper 4095, scale 1:63,360, 1968.

268-447 **Canada Geological Survey.** Aeromagnetic series, Black River, Manitoba: Canada Geol. Survey Geophysics Paper 4096, scale 1:63,360, 1968.

268-448 **Canada Geological Survey.** Aeromagnetic series, Red River Delta, Manitoba: Canada Geol. Survey Geophysics Paper 4118, scale 1:63,360, 1968.

268-449 **Canada Geological Survey.** Aeromagnetic series, Victoria Beach, Manitoba: Canada Geol. Survey Geophysics Paper 4119, scale 1:63,360, 1968.

268-450 **Canada Geological Survey.** Aeromagnetic series, Riverton, Manitoba: Canada Geol. Survey Geophysics Paper 4120, scale 1:63,360, 1968.

268-451 **Canada Geological Survey.** Aeromagnetic series, Teulon, Manitoba: Canada Geol. Survey Geophysics Paper 4142, scale 1:63,360, 1968.

268-452 **Canada Geological Survey.** Aeromagnetic series, Gimli, Manitoba: Canada Geol. Survey Geophysics Paper 4143, scale 1:63,360, 1968.

268-453 **Canada Geological Survey.** Aeromagnetic series, Arborg, Manitoba: Canada Geol. Survey Geophysics Paper 4144, scale 1:63,360, 1968.

268-454 **Canada Geological Survey.** Aeromagnetic series, St. Laurent, Manitoba: Canada Geol. Survey Geophysics Paper 4162, scale 1:63,360, 1968.

268-455 **Canada Geological Survey.** Aeromagnetic series, Narcisse, Manitoba: Canada Geol. Survey Geophysics Paper 4163, scale 1:63,360, 1968.

268-456 **Canada Geological Survey.** Aeromagnetic series, Poplarfield, Manitoba: Canada Geol. Survey Geophysics Paper 4164, scale 1:63,360, 1968.

268-457 **Canada Geological Survey.** Aeromagnetic series, MacDonald, Manitoba: Canada Geol. Survey Geophysics Paper 4177, scale 1:63,360, 1968.

268-458 **Canada Geological Survey.** Aeromagnetic series, St. Ambroise, Manitoba: Canada Geol. Survey Geophysics Paper 4178, scale 1:63,360, 1968.

268-459 **Canada Geological Survey.** Aeromagnetic series, Lundar, Manitoba: Canada Geol. Survey Geophysics Paper 4179, scale 1:63,360, 1968.

268-460 **Canada Geological Survey.** Aeromagnetic series, Eriksdale, Manitoba: Canada Geol. Survey Geophysics Paper 4180, scale 1:63,360, 1968.

268-461 **Canada Geological Survey.** Aeromagnetic series, Ashern, Manitoba: Canada Geol. Survey Geophysics Paper 4181, scale 1:63,360, 1968.

268-462 **Canada Geological Survey.** Aeromagnetic series, Moosehorn, Manitoba: Canada Geol. Survey Geophysics Paper 4182, scale 1:63,360, 1968.

268-463 **Canada Geological Survey.** Aeromagnetic series, Lake St. Martin, Manitoba: Canada Geol. Survey Geophysics Paper 4183, scale 1:63,360, 1968.

68-464 **Canada Geological Survey.** Aeromagnetic series, Dauphin River, Manitoba: Canada Geol. Survey Geophysics Paper 4184, scale 1:63,360, 1968.

68-465 **Canada Geological Survey.** Aeromagnetic series, Gladstone, Manitoba: Canada Geol. Survey Geophysics Paper 4193, scale 1:63,360, 1968.

68-466 **Canada Geological Survey.** Aeromagnetic series, Langruth, Manitoba: Canada Geol. Survey Geophysics Paper 4194, scale 1:63,360, 1968.

268-467 **Canada Geological Survey.** Aeromagnetic series, Amaranth, Manitoba: Canada Geol. Survey Geophysics Paper 4195, scale 1:63,360, 1968.

268-468 **Canada Geological Survey.** Aeromagnetic series, Alonsa, Manitoba: Canada Geol. Survey Geophysics Paper 4196, scale 1:63,360, 1968.

268-469 **Canada Geological Survey.** Aeromagnetic series, Ebb and Flow, Manitoba: Canada Geol. Survey Geophysics Paper 4197, scale 1:63,360, 1968.

268-470 **Canada Geological Survey.** Aeromagnetic series, Steep Rock, Manitoba: Canada Geol. Survey Geophysics Paper 4198, scale 1:63,360, 1968.

268-471 **Canada Geological Survey.** Aeromagnetic series, Fairford, Manitoba: Canada Geol. Survey Geophysics Paper 4199, scale 1:63,360, 1968.

268-472 **Canada Geological Survey.** Aeromagnetic series, Gypsumville, Manitoba: Canada Geol. Survey Geophysics Paper 4200, scale 1:63,360, 1968.

268-473 **Canada Geological Survey.** Aeromagnetic series, McCreary, Manitoba: Canada Geol. Survey Geophysics Paper 4209, scale 1:63,360, 1968.

268-474 **Canada Geological Survey.** Aeromagnetic series, Valpoy, Manitoba: Canada Geol. Survey Geophysics Paper 4210, scale 1:63,360, 1968.

268-475 **Canada Geological Survey.** Aeromagnetic series, Guynemer, Manitoba: Canada Geol. Survey Geophysics Paper 4211, scale 1:63,360, 1968.

268-476 **Canada Geological Survey.** Aeromagnetic series, Crane Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4212, scale 1:63,360, 1968.

268-477 **Canada Geological Survey.** Aeromagnetic series, Proulx Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4213, scale 1:63,360, 1968.

268-478 **Canada Geological Survey.** Aeromagnetic series, Ochre River, Manitoba: Canada Geol. Survey Geophysics Paper 4222, scale 1:63,360, 1968.

268-479 **Canada Geological Survey.** Aeromagnetic series, Rorketon, Manitoba: Canada Geol. Survey Geophysics Paper 4223, scale 1:63,360, 1968.

268-480 **Canada Geological Survey.** Aeromagnetic series, Winnipegosis, Manitoba Canada Geol. Survey Geophysics Paper 4224, scale 1:63,360, 1968.

268-481 **Canada Geological Survey.** Aeromagnetic series, Skownan, Manitoba: Canada Geol. Survey Geophysics Paper 4225, scale 1:63,360, 1968.

268-482 **Canada Geological Survey.** Aeromagnetic series, Garland, Manitoba: Canada Geol. Survey Geophysics Paper 4234, scale 1:63,360, 1968.

268-483 **Canada Geological Survey.** Aeromagnetic series, Sagemace Bay, Manitoba Canada Geol. Survey Geophysics Paper 4235, scale 1:63,360, 1968.

268-484 **Canada Geological Survey.** Aeromagnetic series, Duck Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4236, scale 1:63,360, 1968.

268-485 **Canada Geological Survey.** Aeromagnetic series, Camping Islands, Manitoba Canada Geol. Survey Geophysics Paper 4237, scale 1:63,360, 1968.

268-486 **Canada Geological Survey.** Aeromagnetic series, Kircro Lake, Manitoba: Canad Geol. Survey Geophysics Paper 4238, scale 1:63,360, 1968.

268-487 **Canada Geological Survey.** Aeromagnetic series, Lenswood, Manitoba: Canad Geol. Survey Geophysics Paper 4244, scale 1:63,360, 1968.

268-488 **Canada Geological Survey.** Aeromagnetic series, Pelican Rapids, Manitoba Canada Geol. Survey Geophysics Paper 4245, scale 1:63,360, 1968.

268-489 **Canada Geological Survey.** Aeromagnetic series, Lac Hermas, Quebec: Canada Geol. Survey Geophysics Paper 4943, scale 1:63,360, 1968.

268-490 **Canada Geological Survey.** Aeromagnetic series, Lac Guinecourt, Quebec: Canada Geol. Survey Geophysics Paper 4944, scale 1:63,360, 1968.

268-491 **Canada Geological Survey.** Aeromagnetic series, Lac Tetepisca, Quebec: Canada Geol. Survey Geophysics Paper 4945, scale 1:63,360, 1968.

268-492 **Canada Geological Survey.** Aeromagnetic series, Lac Mouchalagane, Quebec: Canada Geol. Survey Geophysics Paper 4946, scale 1:63,360, 1968.

268-493 **Canada Geological Survey.** Aeromagnetic series, Lac Landriaux, Quebec: Canada Geol. Survey Geophysics Paper 4947, scale 1:63,360, 1968.

268-494 **Canada Geological Survey.** Aeromagnetic series, Lac Salières, Quebec: Canada Geol. Survey Geophysics Paper 4948, scale 1:63,360, 1968.

268-495 **Canada Geological Survey.** Aeromagnetic series, Lac Gaillard, Quebec: Canada Geol. Survey Geophysics Paper 4959, scale 1:63,360, 1968.

268-496 **Canada Geological Survey.** Aeromagnetic series, Lac Okaopéo, Quebec: Canada Geol. Survey Geophysics Paper 4960, scale 1:63,360, 1968.

268-497 **Canada Geological Survey.** Aeromagnetic series, Lac de la Cache, Quebec: Canada Geol. Survey Geophysics Paper 4961, scale 1:63,360, 1968.

268-498 **Canada Geological Survey.** Aeromagnetic series, Lac Bois-Long, Quebec: Canada Geol. Survey Geophysics Paper 4962, scale 1:63,360, 1968.

268-499 **Canada Geological Survey.** Aeromagnetic series, Lac Lacoste, Quebec: Canada Geol. Survey Geophysics Paper 4963, scale 1:63,360, 1968.

268-500 **Canada Geological Survey.** Aeromagnetic series, Mont de Babel, Quebec: Canada Geol. Survey Geophysics Paper 4964, scale 1:63,360, 1968.

268-501 **Canada Geological Survey.** Aeromagnetic series, Lac du Chaunoy, Quebec: Canada Geol. Survey Geophysics Paper 4965, scale 1:63,360, 1968.

268-502 **Canada Geological Survey.** Aeromagnetic series, Lac Pecaudy, Quebec: Canada Geol. Survey Geophysics Paper 4966, scale 1:63,360, 1968.

268-503 **Canada Geological Survey.** Aeromagnetic series, Lac Saint-Pierre, Quebec: Canada Geol. Survey Geophysics Paper 4975, scale 1:63,360, 1968.

268-504 **Canada Geological Survey.** Aeromagnetic series, Lac Clairval, Quebec: Canada Geol. Survey Geophysics Paper 4976, scale 1:63,360, 1968.

268-505 **Canada Geological Survey.** Aeromagnetic series, Lac Lemay, Quebec: Canada Geol. Survey Geophysics Paper 4977, scale 1:63,360, 1968.

268-506 **Canada Geological Survey.** Aeromagnetic series, Lac Mistachagane, Quebec: Canada Geol. Survey Geophysics Paper 4978, scale 1:63,360, 1968.

268-507 **Canada Geological Survey.** Aeromagnetic series, Lac Mathevet, Quebec: Canada Geol. Survey Geophysics Paper 4979, scale 1:63,360, 1968.

268-508 **Canada Geological Survey.** Aeromagnetic series, Lac Manicouagan, Quebec: Canada Geol. Survey Geophysics Paper 4980, scale 1:63,360, 1968.

68-509 **Canada Geological Survey.** Aeromagnetic series, Rivière Hart-Jaune, Quebec: Canada Geol. Survey Geophysics Paper 4981, scale 1:63,360, 1968.

68-510 **Canada Geological Survey.** Aeromagnetic series, Lac Barbel, Quebec: Canada Geol. Survey Geophysics Paper 4982, scale 1:63,360, 1968.

268-511 **Canada Geological Survey.** Aeromagnetic series, Lac Sainte-Anne, Quebec Canada Geol. Survey Geophysics Paper 4991, scale 1:63,360, 1968.

268-512 **Canada Geological Survey.** Aeromagnetic series, Lac Beaudin, Quebec: Canada Geol. Survey Geophysics Paper 4992, scale 1:63,360, 1968.

268-513 **Canada Geological Survey.** Aeromagnetic series, Lac Bouffard, Quebec: Canada Geol. Survey Geophysics Paper 4993, scale 1:63,360, 1968.

268-514 **Canada Geological Survey.** Aeromagnetic series, Lac Fortin, Quebec: Canada Geol. Survey Geophysics Paper 4994, scale 1:63,360, 1968.

268-515 **Canada Geological Survey.** Aeromagnetic series, Lac Grandmesnil, Quebec Canada Geol. Survey Geophysics Paper 4996, scale 1:63,360, 1968.

268-516 **Canada Geological Survey.** Aeromagnetic series, Petit Lac Manicouagan Quebec: Canada Geol. Survey Geophysics Paper 4998, scale 1:63,360, 1968.

268-517 **Canada Geological Survey.** Aeromagnetic series, Lac Vermette, Quebec: Canada Geol. Survey Geophysics Paper 5007, scale 1:63,360, 1968.

268-518 **Canada Geological Survey.** Aeromagnetic series, Lac Walker, Quebec: Canada Geol. Survey Geophysics Paper 5008, scale 1:63,360, 1968.

268-519 **Canada Geological Survey.** Aeromagnetic series, Grand Lac du Nord, Quebec Canada Geol. Survey Geophysics Paper 5010, scale 1:63,360, 1968.

268-520 **Canada Geological Survey.** Aeromagnetic series, Lac Garemand, Quebec Canada Geol. Survey Geophysics Paper 5011, scale 1:63,360, 1968.

268-521 **Canada Geological Survey.** Aeromagnetic series, Lac Catoua, Quebec: Canada Geol. Survey Geophysics Paper 5012, scale 1:63,360, 1968.

268-522 **Canada Geological Survey.** Aeromagnetic series, Rivière de la Montagne Blanche, Quebec: Canada Geol. Survey Geophysics Paper 5013, scale 1:63,360 1968.

268-523 **Canada Geological Survey.** Aeromagnetic series, Lac Gaillarbois, Quebec Canada Geol. Survey Geophysics Paper 5014, scale 1:63,360, 1968.

268-524 **Canada Geological Survey.** Aeromagnetic series, Pointe Jambon, Quebec Canada Geol. Survey Geophysics Paper 5022, scale 1:63,360, 1968.

269-477 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/3 and 76 K/4, Dis trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pape 3622, scale 1:63,360, 1968.

269-478 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/1 and 76 K/2, Dis trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pape 3623, scale 1:63,360, 1968.

269-479 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/3 and 76 J/4, Distric of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3624 scale 1:63,360, 1968.

269-480 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/1 and 76 J/2, Distric of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3625 scale 1:63,360, 1968.

269-481 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/3 and 76 I/4, Distric of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3626 scale 1:63,360, 1968.

69-482 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/1 and 76 I/2, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3627, scale 1:63,360, 1968.

69-483 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/5 and 76 K/6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3628, scale 1:63,360, 1968.

69-484 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/7 and 76 K/8, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3629, scale 1:63,360, 1968.

69-485 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/5 and 76 J/6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3630, scale 1:63,360, 1968.

69-486 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/7 and 76 J/8, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3631, scale 1:63,360, 1968.

69-487 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/5 and 76 I/6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3632, scale 1:63,360, 1968.

69-488 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/7 and 76 I/8, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3633, scale 1:63,360, 1968.

69-489 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/11 and 76 K/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3634, scale 1:63,360, 1968.

69-490 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/9 and 76 K/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3635, scale 1:63,360, 1968.

69-491 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/11 and 76 J/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3636, scale 1:63,360, 1968.

69-492 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/9 and 76 J/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3637, scale 1:63,360, 1968.

69-493 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/11 and 76 I/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3638, scale 1:63,360, 1968.

69-494 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/9 and 76 I/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3639, scale 1:63,360, 1968.

69-495 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/13 and 76 K/14, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3640, scale 1:63,360, 1968.

69-496 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 K/15 and 76 K/16, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3641, scale 1:63,360, 1968.

69-497 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/13 and 76 J/14, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 3642, scale 1:63,360, 1968.

269-498 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 J/15 and 76 J/16, Di trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3643, scale 1:63,360, 1968.

269-499 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/13 and 76 I/14, Di trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3644, scale 1:63,360, 1968.

269-500 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 I/15 and 76 I/16, Di trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3645, scale 1:63,360, 1968.

269-501 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/3 and 76 N/4, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3646, scale 1:63,360, 1968.

269-502 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/1 and 76 N/2, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3647, scale 1:63,360, 1968.

269-503 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/3 and 76 O/4, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3648, scale 1:63,360, 1968.

269-504 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/1 and 76 O/2, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3649, scale 1:63,360, 1968.

269-505 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/3 and 76 P/4, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3650, scale 1:63,360, 1968.

269-506 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/1 and 76 P/2, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3651, scale 1:63,360, 1968.

269-507 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/5 and 76 N/6, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3652, scale 1:63,360, 1968.

269-508 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/7 and 76 N/8, D trict of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Pap 3653, scale 1:63,360, 1968.

269-509 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 K/4, Yukon Territ ry: Canada Geol. Survey Geophysics Paper 4352, scale 1:63,360, 1968.

269-510 **Canada Geological Survey.** Aeromagnetic series, Rose Mountain, Yukon Territ ry: Canada Geol. Survey Geophysics Paper 4353, scale 1:63,360, 1968.

269-511 **Canada Geological Survey.** Aeromagnetic series, Twopete Mountain, Yuk Territory: Canada Geol. Survey Geophysics Paper 4354, scale 1:63,360, 1968.

269-512 **Canada Geological Survey.** Aeromagnetic series, Stokes Lake, Yukon Territo Canada Geol. Survey Geophysics Paper 4355, scale 1:63,360, 1968.

269-513 **Canada Geological Survey.** Aeromagnetic series, Plateau Mountain, Yukon Te ritory: Canada Geol. Survey Geophysics Paper 4356, scale 1:63,360, 1968.

269-514 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/105, Yukon Ter tory: Canada Geol. Survey Geophysics Paper 4357, scale 1:63,360, 1968.

269-515 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/12, Yukon Ter tory: Canada Geol. Survey Geophysics Paper 4358, scale 1:63,360, 1968.

-516 **Canada Geological Survey.** Aeromagnetic series, Penape Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4359, scale 1:63,360, 1968.

-517 **Canada Geological Survey.** Aeromagnetic series, Buttle Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4362, scale 1:63,360, 1968.

-518 **Canada Geological Survey.** Aeromagnetic series, Mount Mye, Yukon Territory: Canada Geol. Survey Geophysics Paper 4363, scale 1:63,360, 1968.

-519 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 K/11, Yukon Territory: Canada Geol. Survey Geophysics Paper 4364, scale 1:63,360, 1968.

-520 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 K/14, Yukon Territory: Canada Geol. Survey Geophysics Paper 4365, scale 1:63,360, 1968.

-521 **Canada Geological Survey.** Aeromagnetic series, Russell Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4366, scale 1:63,360, 1968.

-522 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/6, Yukon Territory: Canada Geol. Survey Geophysics Paper 4367, scale 1:63,360, 1968.

-523 **Canada Geological Survey.** Aeromagnetic series, Lansing, Yukon Territory: Canada Geol. Survey Geophysics Paper 4368, scale 1:63,360, 1968.

-524 **Canada Geological Survey.** Aeromagnetic series, Seven Mile Canyon, Yukon Territory: Canada Geol. Survey Geophysics Paper 4369, scale 1:63,360, 1968.

-525 **Canada Geological Survey.** Aeromagnetic series, Swim Lakes, Yukon Territory: Canada Geol. Survey Geophysics Paper 4372, scale 1:63,360, 1968.

-526 **Canada Geological Survey.** Aeromagnetic series, Blind Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4373, scale 1:63,360, 1968.

-527 **Canada Geological Survey.** Aeromagnetic series, Teddy Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4374, scale 1:63,360, 1968.

-528 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 K/15, Yukon Territory: Canada Geol. Survey Geophysics Paper 4375, scale 1:63,360, 1968.

-529 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/2, Yukon Territory: Canada Geol. Survey Geophysics Paper 4376, scale 1:63,360, 1968.

-530 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/7, Yukon Territory: Canada Geol. Survey Geophysics Paper 4377, scale 1:63,360, 1968.

-531 **Canada Geological Survey.** Aeromagnetic series, Swan Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4378, scale 1:63,360, 1968.

-532 **Canada Geological Survey.** Aeromagnetic series, Mount Ortell, Yukon Territory: Canada Geol. Survey Geophysics Paper 4379, scale 1:63,360, 1968.

-533 **Canada Geological Survey.** Aeromagnetic series, Husky Dog Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4384, scale 1:63,360, 1968.

-534 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/8, Yukon Territory: Canada Geol. Survey Geophysics Paper 4385, scale 1:63,360, 1968.

-535 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/9, Yukon Territory: Canada Geol. Survey Geophysics Paper 4386, scale 1:63,360, 1968.

-536 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 N/16, Yukon Territory: Canada Geol. Survey Geophysics Paper 4387, scale 1:63,360, 1968.

269-538 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/7 and 76 O/8, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4548, scale 1:63,360, 1968.

269-539 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/5 and 76 P/6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4549, scale 1:63,360, 1968.

269-540 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/7 and 76 P/8, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4550, scale 1:63,360, 1968.

269-541 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/11 and 76 N/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4551, scale 1:63,360, 1968.

269-542 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/9 and 76 N/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4552, scale 1:63,360, 1968.

269-543 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/11 and 76 O/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4553, scale 1:63,360, 1968.

269-544 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/9 and 76 O/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4554, scale 1:63,360, 1968.

269-545 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/11 and 76 P/12, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4555, scale 1:63,360, 1968.

269-546 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/9 and 76 P/10, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4556, scale 1:63,360, 1968.

269-547 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/13 and 76 N/14, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4557, scale 1:63,360, 1968.

269-548 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 N/15 and 76 N/16, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4558, scale 1:63,360, 1968.

269-549 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/13 and 76 O/14, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4559, scale 1:63,360, 1968.

269-550 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 O/15 and 76 O/16, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4560, scale 1:63,360, 1968.

269-551 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/13 and 76 P/14, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4561, scale 1:63,360, 1968.

269-552 **Canada Geological Survey.** Aeromagnetic series, Sheet 76 P/15 and 76 P/16, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4562, scale 1:63,360, 1968.

269-553 **Canada Geological Survey.** Aeromagnetic series, Lac Hulot, Quebec: Canada Geol. Survey Geophysics Paper 4941, scale 1:63,360, 1968.

69-554 **Canada Geological Survey.** Aeromagnetic series, Lac Blanzy, Quebec: Canada Geol. Survey Geophysics Paper 4942, scale 1:63,360, 1968.

69-555 **Canada Geological Survey.** Aeromagnetic series, Lac Bardoux, Quebec: Canada Geol. Survey Geophysics Paper 4995, scale 1:63,360, 1968.

69-556 **Canada Geological Survey.** Aeromagnetic series, Lac Raudot, Quebec: Canada Geol. Survey Geophysics Paper 4997, scale 1:63,360, 1968.

69-557 **Canada Geological Survey.** Aeromagnetic series, Lac Rond, Quebec: Canada Geol. Survey Geophysics Paper 5009, scale 1:63,360, 1968.

69-558 **Canada Geological Survey.** Aeromagnetic series, Sept-Îles, Quebec: Canada Geol. Survey Geophysics Paper 5039, scale 1:63,360, 1968.

69-559 **Canada Geological Survey.** Aeromagnetic series, Lac des Rapides, Quebec: Canada Geol. Survey Geophysics Paper 5040, scale 1:63,360, 1968.

69-560 **Canada Geological Survey.** Aeromagnetic series, Rivière Vallee, Quebec: Canada Geol. Survey Geophysics Paper 5041, scale 1:63,360, 1968.

69-561 **Canada Geological Survey.** Aeromagnetic series, Lac à l'Eau-Dorée, Quebec: Canada Geol. Survey Geophysics Paper 5042, scale 1:63,360, 1968.

69-562 **Canada Geological Survey.** Aeromagnetic series, Lac Nipissis, Quebec: Canada Geol. Survey Geophysics Paper 5043, scale 1:63,360, 1968.

69-563 **Canada Geological Survey.** Aeromagnetic series, Grand Lac au Sable, Quebec: Canada Geol. Survey Geophysics Paper 5044, scale 1:63,360, 1968.

69-564 **Canada Geological Survey.** Aeromagnetic series, Lac Brochet, Quebec: Canada Geol. Survey Geophysics Paper 5045, scale 1:63,360, 1968.

69-565 **Canada Geological Survey.** Aeromagnetic series, Lac Poissons-Blancs, Quebec: Canada Geol. Survey Geophysics Paper 5046, scale 1:63,360, 1968.

69-566 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 I/3, Quebec: Canada Geol. Survey Geophysics Paper 5073, scale 1:63,360, 1968.

69-567 **Canada Geological Survey.** Aeromagnetic series, Rivière aux Graines, Quebec: Canada Geol. Survey Geophysics Paper 5074, scale 1:63,360, 1968.

69-568 **Canada Geological Survey.** Aeromagnetic series, Lac Brézel, Quebec: Canada Geol. Survey Geophysics Paper 5075, scale 1:63,360, 1968.

69-569 **Canada Geological Survey.** Aeromagnetic series, Lac Manitou, Quebec: Canada Geol. Survey Geophysics Paper 5076, scale 1:63,360, 1968.

69-570 **Canada Geological Survey.** Aeromagnetic series, Lac à l'Aigle, Quebec: Canada Geol. Survey Geophysics Paper 5077, scale 1:63,360, 1968.

69-571 **Canada Geological Survey.** Aeromagnetic series, Lac Vital, Quebec: Canada Geol. Survey Geophysics Paper 5078, scale 1:63,360, 1968.

69-572 **Canada Geological Survey.** Aeromagnetic series, Lac Fournier, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5079, scale 1:63,360, 1968.

69-573 **Canada Geological Survey.** Aeromagnetic series, Lac Fleur-de-May, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5080, scale 1:63,360, 1968.

69-574 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 I/2, Quebec: Canada Geol. Survey Geophysics Paper 5090, scale 1:63,360, 1968.

269-575 **Canada Geological Survey.** Aeromagnetic series, Sheldrake, Quebec: Canada Geol. Survey Geophysics Paper 5091, scale 1:63,360, 1968.

269-576 **Canada Geological Survey.** Aeromagnetic series, Lac a Renard, Quebec: Canada Geol. Survey Geophysics Paper 5092, scale 1:63,360, 1968.

269-577 **Canada Geological Survey.** Aeromagnetic series, Lac de la Mine, Quebec: Canada Geol. Survey Geophysics Paper 5093, scale 1:63,360, 1968.

269-578 **Canada Geological Survey.** Aeromagnetic series, Magpie Lake North, Quebec: Canada Geol. Survey Geophysics Paper 5094, scale 1:63,360, 1968.

269-579 **Canada Geological Survey.** Aeromagnetic series, Lac Catignan, Quebec: Canada Geol. Survey Geophysics Paper 5095, scale 1:63,360, 1968.

269-580 **Canada Geological Survey.** Aeromagnetic series, Sheet 22 P/10, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5096, scale 1:63,360, 1968.

269-581 **Canada Geological Survey.** Aeromagnetic series, Lac Domagaya, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5097, scale 1:63,360, 1968.

269-582 **Canada Geological Survey.** Aeromagnetic series, Île de Mingan, Quebec: Canada Geol. Survey Geophysics Paper 5107, scale 1:63,360, 1968.

269-583 **Canada Geological Survey.** Aeromagnetic series, Mingan, Quebec: Canada Geol. Survey Geophysics Paper 5108, scale 1:63,360, 1968.

269-584 **Canada Geological Survey.** Aeromagnetic series, Lac Esnault, Quebec: Canada Geol. Survey Geophysics Paper 5109, scale 1:63,360, 1968.

269-585 **Canada Geological Survey.** Aeromagnetic series, Lac Ternet, Quebec: Canada Geol. Survey Geophysics Paper 5110, scale 1:63,360, 1968.

269-586 **Canada Geological Survey.** Aeromagnetic series, Riviere Poisset, Quebec: Canada Geol. Survey Geophysics Paper 5111, scale 1:63,360, 1968.

269-587 **Canada Geological Survey.** Aeromagnetic series, Lac Verrier, Quebec: Canada Geol. Survey Geophysics Paper 5112, scale 1:63,360, 1968.

269-588 **Canada Geological Survey.** Aeromagnetic series, Lac Bellanca, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5113, scale 1:63,360, 1968.

269-589 **Canada Geological Survey.** Aeromagnetic series, Lac Thévet, Quebec-Newfoundland: Canada Geol. Survey Geophysics Paper 5114, scale 1:63,360, 1968.

270-157 **Canada Geological Survey.** Report of activities—Pt. A, April to October, 1968: Canada Geol. Survey Paper 69-1, pt. A, 263 p., illus., tables, 1969.

270-302 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3823, scale 1:63,360, 1968.

270-303 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3824, scale 1:63,360, 1968.

270-304 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3825, scale 1:63,360, 1968.

270-305 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3826, scale 1:63,360, 1968.

70-306 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3827, scale 1:63,360, 1968.

70-307 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3828, scale 1:63,360, 1968.

70-308 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3829, scale 1:63,360, 1968.

70-309 **Canada Geological Survey.** Aeromagnetic series, Winino Creek, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3830, scale 1:63,360, 1968.

70-310 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/2, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3831, scale 1:63,360, 1968.

70-311 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3832, scale 1:63,360, 1968.

70-312 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/10, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3833, scale 1:63,360, 1968.

70-313 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3834, scale 1:63,360, 1968.

70-314 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/1, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3835, scale 1:63,360, 1968.

70-315 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3836, scale 1:63,360, 1968.

70-316 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/9, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3837, scale 1:63,360, 1968.

0-317 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 E/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3838, scale 1:63,360, 1968.

0-318 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/1, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3839, scale 1:63,360, 1968.

0-319 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3840, scale 1:63,360, 1968.

0-320 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/9, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3841, scale 1:63,360, 1968.

0-321 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 L/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3842, scale 1:63,360, 1968.

270-322 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/1, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3843, scale 1:63,360, 1968.

270-323 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3844, scale 1:63,360, 1968.

270-324 **Canada Geological Survey.** Aeromagnetic series, Wood Creek, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3845, scale 1:63,360, 1968.

270-325 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 M/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3846, scale 1:63,360, 1968.

270-326 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/3, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3878, scale 1:63,360, 1968.

270-327 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/6, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3879, scale 1:63,360, 1968.

270-328 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/11, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3880, scale 1:63,360, 1968.

270-329 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 F/14, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3881, scale 1:63,360, 1968.

270-330 **Canada Geological Survey.** Aeromagnetic series, Pine Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3882, scale 1:63,360, 1968.

270-331 **Canada Geological Survey.** Aeromagnetic series, Spruce Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3883, scale 1:63,360, 1968.

270-332 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 K/11, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3884, scale 1:63,360, 1968.

270-333 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 K/14, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3885, scale 1:63,360, 1968.

270-334 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 N/3, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3886, scale 1:63,360, 1968.

270-335 **Canada Geological Survey.** Aeromagnetic series, Winisk, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3887, scale 1:63,360, 1968.

270-336 **Canada Geological Survey.** Ship magnetometer series, Sheets 20 O/1, 2, 6-11, 14-16, East and West, Scotian Shelf: Canada Geol. Survey Geophysics Papers 5324-5342, scale 1:31,680, 1968.

271-399 **Canada Geological Survey.** Aeromagnetic series, Einarson Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4340, scale 1:63,360, 1968.

271-400 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 O/12, Yukon Territory: Canada Geol. Survey Geophysics Paper 4341, scale 1:63,360, 1968.

71-401 **Canada Geological Survey.** Aeromagnetic series, Emerald Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4342, scale 1:63,360, 1968.

71-402 **Canada Geological Survey.** Aeromagnetic series, Sheets 105 O/4 and 105 O/3, Yukon Territory: Canada Geol. Survey Geophysics Papers 4343-4344, scale 1:63,360, 1968.

71-403 **Canada Geological Survey.** Aeromagnetic Series, Niddery Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4345, scale 1:63,360, 1968.

71-404 **Canada Geological Survey.** Aeromagnetic series, Arrowhead Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4346, scale 1:63,360, 1968.

71-405 **Canada Geological Survey.** Aeromagnetic series, Marmot Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4347, scale 1:63,360, 1968.

71-406 **Canada Geological Survey.** Aeromagnetic series, Sheets 105 O/15, 105 O/10, 105 O/7, and 105 O/2, Yukon Territory: Canada Geol. Survey Geophysics Papers 4348-4351, scale 1:63,360, 1968.

71-407 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 O/1, Yukon Territory, Northwest Territories: Canada Geol. Survey Geophysics Paper 4360, scale 1:63,360, 1968.

71-408 **Canada Geological Survey.** Aeromagnetic series, Keele Peak, Yukon Territory, Northwest Territories: Canada Geol. Survey Geophysics Paper 4361, scale 1:63,360, 1968.

71-409 **Canada Geological Survey.** Aeromagnetic series, Sheets 105 O/9 and 105 O/16, Yukon Territory, Northwest Territories: Canada Geol. Survey Geophysics Papers 4370-4371, scale 1:63,360, 1968.

71-410 **Canada Geological Survey.** Aeromagnetic series, Tenas Creek, Yukon Territory: Canada Geol. Survey Geophysics Paper 4380, scale 1:63,360, 1968.

71-411 **Canada Geological Survey.** Aeromagnetic series, Blind Lakes, Yukon Territory: Canada Geol. Survey Geophysics Paper 4381, scale 1:63,360, 1968.

71-412 **Canada Geological Survey.** Aeromagnetic series, Laforce Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4382, scale 1:63,360, 1968.

71-413 **Canada Geological Survey.** Aeromagnetic series, Mount Selous, Yukon Territory: Canada Geol. Survey Geophysics Paper 4383, scale 1:63,360, 1968.

71-414 **Canada Geological Survey.** Aeromagnetic series, Marjorie Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4388, scale 1:63,360, 1968.

71-415 **Canada Geological Survey.** Aeromagnetic series, Sheets 105 J/5, 105 J/12, 105 J/13, and 105 J/3, Yukon Territory: Canada Geol. Survey Geophysics Papers 4389-4392, scale 1:63,360, 1968.

71-416 **Canada Geological Survey.** Aeromagnetic series, Jackfish Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4393, scale 1:63,360, 1968.

71-417 **Canada Geological Survey.** Aeromagnetic series, Sheldon Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 4394, scale 1:63,360, 1968.

71-418 **Canada Geological Survey.** Aeromagnetic series, Sheets 105 J/14, 105 J/2, 105 J/7, 105 J/10, and 105 J/15, Yukon Territory: Canada Geol. Survey Geophysics Paper 4395-4399, scale 1:63,360, 1968.

71-419 **Canada Geological Survey.** Aeromagnetic series, Pelly Lakes, Yukon Territory: Canada Geol. Survey Geophysics Paper 4400, scale 1:63,360, 1968.

71-420 **Canada Geological Survey.** Aeromagnetic series, Wolf Canyon, Yukon Territory: Canada Geol. Survey Geophysics Paper 4401, scale 1:63,360, 1968.

271-421 **Canada Geological Survey.** Aeromagnetic series, Sheet 105 J/9, Yukon Territory: Canada Geol. Survey Geophysics Paper 4402, scale 1:63,360, 1968.

271-422 **Canada Geological Survey.** Aeromagnetic series, Itsi Lakes, Yukon Territory: Canada Geol. Survey Geophysics Paper 4403, scale 1:63,360, 1968.

271-423 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 98 G/SW, 9,8 G/NW, 99 B/SW, 99 B/NW, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5406-5409, scale 1:126,720, 1968.

271-424 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 108 E/NE, 108 H/SE, and 108 H/NE, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5410-5412, scale 1:126,720, 1968.

271-425 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 109 A/SE, 109 A/NE, 109 D/SE, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5413-5415, scale 1:126,720, 1968.

271-426 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 108 E/NW, 108 H/SW, 108 H/NW, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5416-5418, scale 1:126,720, 1968.

271-427 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 109 A/SW, 109 A/NW, 109 D/SW, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5419-5421, scale 1:126,720, 1968.

271-428 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 108 F/NE, 108 G/SE, 108 G/NE, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5422-5424, scale 1:126,720, 1968.

271-429 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 109 B/SE, 109 B/NE, 109 C/SE, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5425-5427, scale 1:126,720, 1968.

271-430 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 108 F/NW, 108 G/SW, 108 G/NW, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5428-5430, scale 1:126,720, 1968.

271-431 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 109 B/SW, 109 B/NW, 109 C/SW, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 5431-5433, scale 1:126,720, 1968.

271-432 **Canada Geological Survey.** Aeromagnetic series, English Brook, Manitoba: Canada Geol. Survey Geophysics Paper 4097, scale 1:63,360, 1969.

271-433 **Canada Geological Survey.** Aeromagnetic series, Shallow Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4098, scale 1:63,360, 1969.

271-434 **Canada Geological Survey.** Aeromagnetic series, Hecla Island, Manitoba: Canada Geol. Survey Geophysics Paper 4121, scale 1:63,360, 1969.

271-435 **Canada Geological Survey.** Aeromagnetic series, Anderson Point, Manitoba: Canada Geol. Survey Geophysics Paper 4122, scale 1:63,360, 1969.

271-436 **Canada Geological Survey.** Aeromagnetic series, Bull Head, Manitoba: Canada Geol. Survey Geophysics Paper 4223, scale 1:63,360, 1969.

271-437 **Canada Geological Survey.** Aeromagnetic series, Bradbury River, Manitoba: Canada Geol. Survey Geophysics Paper 4124, scale 1:63,360, 1969.

271-438 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 A/2, Manitoba: Canada Geol. Survey Geophysics Paper 4125, scale 1:63,360, 1969.

271-439 **Canada Geological Survey.** Aeromagnetic series, Shorncliffe, Manitoba: Canada Geol. Survey Geophysics Paper 4145, scale 1:63,360, 1969.

271-440 **Canada Geological Survey.** Aeromagnetic series, Koostatak, Manitoba: Canada Geol. Survey Geophysics Paper 4146, scale 1:63,360, 1969.

271-441 **Canada Geological Survey.** Aeromagnetic series, Moose Islands, Manitoba: Canada Geol. Survey Geophysics Paper 4147, scale 1:63,360, 1969.

271-442 **Canada Geological Survey.** Aeromagnetic series, Jackhead Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4148, scale 1:63,360, 1969.

271-443 **Canada Geological Survey.** Aeromagnetic series, Commissioner Island, Manitoba: Canada Geol. Survey Geophysics Paper 4149, scale 1:63,360, 1969.

271-444 **Canada Geological Survey.** Aeromagnetic series, Berens River, Manitoba: Canada Geol. Survey Geophysics Paper 4150, scale 1:63,360, 1969.

271-445 **Canada Geological Survey.** Aeromagnetic series, Mossy Point, Manitoba: Canada Geol. Survey Geophysics Paper 4151, scale 1:63,360, 1969.

271-446 **Canada Geological Survey.** Aeromagnetic series, Marchand Creek, Manitoba: Canada Geol. Survey Geophysics Paper 4152, scale 1:63,360, 1969.

271-447 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 H/6, Manitoba: Canada Geol. Survey Geophysics Paper 4154, scale 1:63,360, 1969.

271-448 **Canada Geological Survey.** Aeromagnetic series, Costes Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4156, scale 1:63,360, 1969.

271-449 **Canada Geological Survey.** Aeromagnetic series, Hodgson, Manitoba: Canada Geol. Survey Geophysics Paper 4165, scale 1:63,360, 1969.

271-450 **Canada Geological Survey.** Aeromagnetic series, Harwill, Manitoba: Canada Geol. Survey Geophysics Paper 4166, scale 1:63,360, 1969.

271-451 **Canada Geological Survey.** Aeromagnetic series, Sheet 62 P/12, Manitoba: Canada Geol. Survey Geophysics Paper 4167, scale 1:63,360, 1969.

271-452 **Canada Geological Survey.** Aeromagnetic series, Sturgeon Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4168, scale 1:63,360, 1969.

271-453 **Canada Geological Survey.** Aeromagnetic series, Lynx Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4169, scale 1:63,360, 1969.

271-454 **Canada Geological Survey.** Aeromagnetic series, Reindeer Island East, Manitoba: Canada Geol. Survey Geophysics Paper 4170, scale 1:63,360, 1969.

271-455 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 A/12, Manitoba: Canada Geol. Survey Geophysics Paper 4171, scale 1:63,360, 1969.

271-456 **Canada Geological Survey.** Aeromagnetic series, George Islands, Manitoba: Canada Geol. Survey Geophysics Paper 4172, scale 1:63,360, 1969.

271-457 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 H/4, Manitoba: Canada Geol. Survey Geophysics Paper 4173, scale 1:63,360, 1969.

271-458 **Canada Geological Survey.** Aeromagnetic series, Belanger Point, Manitoba: Canada Geol. Survey Geophysics Paper 4174, scale 1:63,360, 1969.

271-459 **Canada Geological Survey.** Aeromagnetic series, Warren Landing, Manitoba: Canada Geol. Survey Geophysics Paper 4175, scale 1:63,360, 1969.

271-460 **Canada Geological Survey.** Aeromagnetic series, Norway House, Manitoba Canada Geol. Survey Geophysics Paper 4176, scale 1:63,360, 1969.

271-461 **Canada Geological Survey.** Aeromagnetic series, Clark Point, Manitoba: Canada Geol. Survey Geophysics Paper 4185, scale 1:63,360, 1969.

271-462 **Canada Geological Survey.** Aeromagnetic series, Reindeer Island West Manitoba: Canada Geol. Survey Geophysics Paper 4186, scale 1:63,360, 1969.

271-463 **Canada Geological Survey.** Aeromagnetic series, Sheets 63 B/9 and 63 B/16 Manitoba: Canada Geol. Survey Geophysics Papers 4187-4188, scale 1:63,360 1969.

271-464 **Canada Geological Survey.** Aeromagnetic series, Sheets 63 G/1, 63 G/8, 63 G/9 Manitoba: Canada Geol. Survey Geophysics Papers 4189-4191, scale 1:63,360 1969.

271-465 **Canada Geological Survey.** Aeromagnetic series, Playgreen Lake, Manitoba Canada Geol. Survey Geophysics Paper 4192, scale 1:63,360, 1969.

271-466 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 B/2, Manitoba Canada Geol. Survey Geophysics Paper 4201, scale 1:63,360, 1969.

271-467 **Canada Geological Survey.** Aeromagnetic series, Reedy Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4202, scale 1:63,360, 1969.

271-468 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 B/10, Manitoba Canada Geol. Survey Geophysics Paper 4203, scale 1:63,360, 1969.

271-469 **Canada Geological Survey.** Aeromagnetic series, Wicked Point, Manitoba Canada Geol. Survey Geophysics Paper 4204, scale 1:63,360, 1969.

271-470 **Canada Geological Survey.** Aeromagnetic series, Long Point, Manitoba: Canad Geol. Survey Geophysics Paper 4205, scale 1:63,360, 1969.

271-471 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 G/7, Manitoba Canada Geol. Survey Geophysics Paper 4206, scale 1:63,360, 1969.

271-472 **Canada Geological Survey.** Aeromagnetic series, Eagle Island, Manitoba: Canad Geol. Survey Geophysics Paper 4207, scale 1:63,360, 1969.

271-473 **Canada Geological Survey.** Aeromagnetic series, Limestone Bay, Manitoba Canada Geol. Survey Geophysics Paper 4208, scale 1:63,360, 1969.

271-474 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 B/3, Manitoba Canada Geol. Survey Geophysics Paper 4214, scale 1:63,360, 1969.

271-475 **Canada Geological Survey.** Aeromagnetic series, Chitek Lake, Manitoba Canada Geol. Survey Geophysics Paper 4215, scale 1:63,360, 1969.

271-476 **Canada Geological Survey.** Aeromagnetic series, Sisib Lake, Manitoba: Canad Geol. Survey Geophysics Paper 4216, scale 1:63,360, 1969.

271-477 **Canada Geological Survey.** Aeromagnetic series, Katimik Lake, Manitoba Canada Geol. Survey Geophysics Paper 4217, scale 1:63,360, 1969.

271-478 **Canada Geological Survey.** Aeromagnetic series, Grand Rapids, Manitoba Canada Geol. Survey Geophysics Paper 4218, scale 1:63,360, 1969.

271-479 **Canada Geological Survey.** Aeromagnetic series, Selkirk Island, Manitoba Canada Geol. Survey Geophysics Paper 4219, scale 1:63,360, 1969.

271-480 **Canada Geological Survey.** Aeromagnetic series, Howell Point, Manitoba Canada Geol. Survey Geophysics Paper 4220, scale 1:63,360, 1969.

271-481 **Canada Geological Survey.** Aeromagnetic series, William Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4221, scale 1:63,360, 1969.

271-482 **Canada Geological Survey.** Aeromagnetic series, Waterhen Lake North, Manitoba: Canada Geol. Survey Geophysics Paper 4226, scale 1:63,360, 1969.

271-483 **Canada Geological Survey.** Aeromagnetic series, Birch Island, Manitoba: Canada Geol. Survey Geophysics Paper 4227, scale 1:63,360, 1969.

271-484 **Canada Geological Survey.** Aeromagnetic series, Point Laronde, Manitoba: Canada Geol. Survey Geophysics Paper 4228, scale 1:63,360, 1969.

271-485 **Canada Geological Survey.** Aeromagnetic series, Denbeigh Point, Manitoba: Canada Geol. Survey Geophysics Paper 4229, scale 1:63,360, 1969.

271-486 **Canada Geological Survey.** Aeromagnetic series, Napanee Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4230, scale 1:63,360, 1969.

271-487 **Canada Geological Survey.** Aeromagnetic series, Norris Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4231, scale 1:63,360, 1969.

271-488 **Canada Geological Survey.** Aeromagnetic series, Sheet 63 G/12, Manitoba: Canada Geol. Survey Geophysics Paper 4232, scale 1:63,360, 1969.

271-489 **Canada Geological Survey.** Aeromagnetic series, Davidson Lake, Manitoba: Canada Geol. Survey Geophysics Paper 4233, scale 1:63,360, 1969.

271-490 **Canada Geological Survey.** Aeromagnetic series, Pelican Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4239, scale 1:63,360, 1969.

271-491 **Canada Geological Survey.** Aeromagnetic series, Mossy Portage, Manitoba: Canada Geol. Survey Geophysics Paper 4240, scale 1:63,360, 1969.

271-492 **Canada Geological Survey.** Aeromagnetic series, Crossing Island, Manitoba: Canada Geol. Survey Geophysics Paper 4241, scale 1:63,360, 1969.

271-493 **Canada Geological Survey.** Aeromagnetic series, Nason Point, Manitoba: Canada Geol. Survey Geophysics Paper 4246, scale 1:63,360, 1969.

271-494 **Canada Geological Survey.** Aeromagnetic series, Spruce Island, Manitoba: Canada Geol. Survey Geophysics Paper 4247, scale 1:63,360, 1969.

271-495 **Canada Geological Survey.** Aeromagnetic series, Barrows, Manitoba: Canada Geol. Survey Geophysics Paper 4251, scale 1:63,360, 1969.

271-496 **Canada Geological Survey.** Aeromagnetic series, Dawson Bay, Manitoba: Canada Geol. Survey Geophysics Paper 4252, scale 1:63,360, 1969.

272-387 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 C/13 and 43 C/14, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3856 and 3877, scale 1:63,360, 1968.

272-388 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 C/15 and 43 C/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3901 and 3924, scale 1:63,360, 1969.

272-389 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 F/2, 43 F/7, 43 F/10 and 43 F/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3902-3905, scale 1:63,360, 1969.

272-390 **Canada Geological Survey.** Aeromagnetic series, Sutton Lake South, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3906, scale 1:63,360, 1969.

272-391 **Canada Geological Survey.** Aeromagnetic series, Sutton Lake North, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3907, scale 1:63,360, 1969.

272-392 **Canada Geological Survey.** Aeromagnetic series, Warchesku Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3908, scale 1:63,360, 1969.

272-393 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 K/15, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3909, scale 1:63,360, 1969.

272-394 **Canada Geological Survey.** Aeromagnetic series, Sheet 43 N/2 and part of 43 N/7, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3910, scale 1:63,360, 1969.

272-395 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 F/1, 43 F/8 and 43 F/9, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3925-3927, scale 1:63,360, 1969.

272-396 **Canada Geological Survey.** Aeromagnetic series, Opinnagau Lake, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3928, scale 1:63,360, 1969.

272-397 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 K/1, 43 K/8, 43 K/9 and 43 K/16, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3929-3932, scale 1:63,360, 1969.

272-398 **Canada Geological Survey.** Aeromagnetic series, Burntpoint Creek and part of Sheet 43 N/8, District of Kenora, Ontario: Canada Geol. Survey Geophysics Paper 3933, scale 1:63,360, 1969.

272-399 **Canada Geological Survey.** Aeromagnetic series, Sheets 43 B/13 and 43 B/14, District of Kenora, Ontario: Canada Geol. Survey Geophysics Papers 3947 and 3970, scale 1:63,360, 1969.

272-400 **Canada Geological Survey.** Aeromagnetic series, Chedakuz Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5287, scale 1:63,360, 1969.

272-401 **Canada Geological Survey.** Aeromagnetic series, Natalkuz Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5288, scale 1:63,360, 1969.

272-402 **Canada Geological Survey.** Aeromagnetic series, Tetachuck Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5289, scale 1:63,360, 1969.

272-403 **Canada Geological Survey.** Aeromagnetic series, Tlutlias Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5290, scale 1:63360, 1969.

272-404 **Canada Geological Survey.** Aeromagnetic series, St. Thomas River, British Columbia: Canada Geol. Survey Geophysics Paper 5291, scale 1:63,360, 1969.

272-405 **Canada Geological Survey.** Aeromagnetic series, Whitesail Reach, British Columbia: Canada Geol. Survey Geophysics Paper 5292, scale 1:63,360, 1969.

272-406 **Canada Geological Survey.** Aeromagnetic series, Ghitezli Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5293, scale 1:63,360, 1969.

272-407 **Canada Geological Survey.** Aeromagnetic series, Marilla, British Columbia: Canada Geol. Survey Geophysics Paper 5294, scale 1:63,360, 1969.

272-408 **Canada Geological Survey.** Aeromagnetic series, Cheslatta Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5295, scale 1:63,360, 1969.

272-409 **Canada Geological Survey.** Aeromagnetic series, Knapp Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5296, scale 1:63,360, 1969.

272-410 **Canada Geological Survey.** Aeromagnetic series, Takysie Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5297, scale 1:63,360, 1969.

272-411 **Canada Geological Survey.** Aeromagnetic series, Wistaria, British Columbia: Canada Geol. Survey Geophysics Paper 5298, scale 1:63,360, 1969.

272-412 **Canada Geological Survey.** Aeromagnetic series, Nadina River, British Columbia: Canada Geol. Survey Geophysics Paper 5299, scale 1:63,360, 1969.

272-413 **Canada Geological Survey.** Aeromagnetic series, Lamprey Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5300, scale 1:63,360, 1969.

272-414 **Canada Geological Survey.** Aeromagnetic series, Owen Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5301, scale 1:63,360, 1969.

272-415 **Canada Geological Survey.** Aeromagnetic series, Colleymount, British Columbia: Canada Geol. Survey Geophysics Paper 5302, scale 1:63,360, 1969.

272-416 **Canada Geological Survey.** Aeromagnetic series, Burns Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5303, scale 1:63,360, 1969.

272-417 **Canada Geological Survey.** Aeromagnetic series, Endako, British Columbia: Canada Geol. Survey Geophysics Paper 5304, scale 1:63,360, 1969.

272-418 **Canada Geological Survey.** Aeromagnetic series, Taltapin Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5305, scale 1:63,360, 1969.

272-419 **Canada Geological Survey.** Aeromagnetic series, Decker Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5306, scale 1:63,360, 1969.

272-420 **Canada Geological Survey.** Aeromagnetic series, Forestdale, British Columbia: Canada Geol. Survey Geophysics Paper 5307, scale 1:63,360, 1969.

272-421 **Canada Geological Survey.** Aeromagnetic series, Houston, British Columbia: Canada Geol. Survey Geophysics Paper 5308, scale 1:63,360, 1969.

272-422 **Canada Geological Survey.** Aeromagnetic series, Thautil River, British Columbia: Canada Geol. Survey Geophysics Paper 5309, scale 1:63,360, 1969.

272-423 **Canada Geological Survey.** Aeromagnetic series, Telkwa, British Columbia: Canada Geol. Survey Geophysics Paper 5310, scale 1:63,360, 1969.

272-424 **Canada Geological Survey.** Aeromagnetic series, Quick, British Columbia: Canada Geol. Survey Geophysics Paper 5311, scale 1:63,360, 1969.

272-425 **Canada Geological Survey.** Aeromagnetic series, Topley, British Columbia: Canada Geol. Survey Geophysics Paper 5312, scale 1:63,360, 1969.

272-426 **Canada Geological Survey.** Aeromagnetic series, Specularite Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5313, scale 1:63,360, 1969.

272-427 **Canada Geological Survey.** Aeromagnetic series, Cunningham Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5314, scale 1:63,360, 1969.

272-428 **Canada Geological Survey.** Aeromagnetic series, Trembleur Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5315, scale 1:63,360, 1969.

272-429 **Canada Geological Survey.** Aeromagnetic series, Tildesley Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5316, scale 1:63,360, 1969.

272-430 **Canada Geological Survey.** Aeromagnetic series, Fulton Lake, British Columbia: Canada Geol. Survey Geophysics Paper 5317, scale 1:63,360, 1969.

272-431 **Canada Geological Survey.** Aeromagnetic series, Driftwood Creek, British Columbia: Canada Geol. Survey Geophysics Paper 5318, scale 1:63,360, 1969.

272-432 **Canada Geological Survey.** Aeromagnetic series, Smithers, British Columbia: Canada Geol. Survey Geophysics Paper 5319, scale 1:63,360, 1969.

272-433 **Canada Geological Survey.** Aeromagnetic series, Hyde Lake, District of Keewatin, Northwest Territories: Canada Geol. Survey Geophysics Paper 7164, scale 1:253,440, 1969.

272-434 **Canada Geological Survey.** Aeromagnetic series, Edehon Lake, District of Keewatin, Northwest Territories: Canada Geol. Survey Geophysics Paper 7165, scale 1:253,440, 1969.

272-435 **Canada Geological Survey.** Aeromagnetic series, Nueltin Lake, District of Keewatin, Northwest Territories: Canada Geol. Survey Geophysics Paper 7166, scale 1:253,440, 1969.

272-436 **Canada Geological Survey.** Aeromagnetic series, Ennadai Lake, District of Keewatin, Northwest Territories: Canada Geol. Survey Geophysics Paper 7167, scale 1:253,440, 1969.

272-437 **Canada Geological Survey.** Aeromagnetic series, Snowbird Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7168, scale 1:253,440, 1969.

272-438 **Canada Geological Survey.** Aeromagnetic series, Wholdaia Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7169, scale 1:253,440, 1969.

272-439 **Canada Geological Survey.** Aeromagnetic series, Abitau Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7170, scale 1:253,440, 1969.

272-440 **Canada Geological Survey.** Aeromagnetic series, Boyd Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7180, scale 1:253,440, 1969.

272-441 **Canada Geological Survey.** Aeromagnetic series, Rennie Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7181, scale 1:253,440, 1969.

272-442 **Canada Geological Survey.** Aeromagnetic series, McCann Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7182, scale 1:253,440, 1969.

272-443 **Canada Geological Survey.** Aeromagnetic series, Beaverhill Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7186, scale 1:253,440, 1969.

272-444 **Canada Geological Survey.** Aeromagnetic series, Lynx Lake, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 7187, scale 1:253,440, 1969.

272-445 **Canada Geological Survey.** Aeromagnetic series, Vernon, British Columbia: Canada Geol. Survey Geophysics Paper 7216, scale 1:253,440, 1969.

272-446 **Canada Geological Survey.** Aeromagnetic series, Ashcroft, British Columbia: Canada Geol. Survey Geophysics Paper 7217, scale 1:253,440, 1969.

272-447 **Canada Geological Survey.** Aeromagnetic series, Seymour Arm, British Columbia: Canada Geol. Survey Geophysics Paper 7219, scale 1:253,440, 1969.

272-448 **Canada Geological Survey.** Aeromagnetic series, Quesnel Lake, British Columbia: Canada Geol. Survey Geophysics Paper 7221, scale 1:253,440, 1969.

272-449 **Canada Geological Survey.** Aeromagnetic series, Nechako River, British Columbia: Canada Geol. Survey Geophysics Paper 7224, scale 1:253,440, 1969.

272-450 **Canada Geological Survey.** Aeromagnetic series, Fort Fraser, British Columbia: Canada Geol. Survey Geophysics Paper 7226, scale 1:253,440, 1969.

272-451 **Canada Geological Survey.** Aeromagnetic series, Winnipeg, Manitoba: Canada Geol. Survey Geophysics Paper 7301, scale 1:253,440, 1969.

272-452 **Canada Geological Survey.** Aeromagnetic series, Selkirk, Manitoba: Canada Geol. Survey Geophysics Paper 7692, scale 1:253,440, 1969.

272-453 **Canada Geological Survey.** Aeromagnetic series, Neepawa, Manitoba: Canada Geol. Survey Geophysics Paper 7693, scale 1:253,440, 1969.

272-454 **Canada Geological Survey.** Aeromagnetic series, Hecla, Manitoba: Canada Geol. Survey Geophysics Paper 7706, scale 1:253,440, 1969.

272-455 **Canada Geological Survey.** Aeromagnetic series, Dauphin Lake, Manitoba: Canada Geol. Survey Geophysics Paper 7707, scale 1:253,440, 1969.

272-456 **Canada Geological Survey.** Aeromagnetic series, Duck Mountain, Manitoba: Canada Geol. Survey Geophysics Paper 7708, scale 1:253,440, 1969.

272-457 **Canada Geological Survey.** Aeromagnetic series, Berens River, Manitoba: Canada Geol. Survey Geophysics Paper 7722, scale 1:253,440, 1969.

272-458 **Canada Geological Survey.** Aeromagnetic series, Waterhen Lake, Manitoba: Canada Geol. Survey Geophysics Paper 7723, scale 1:253,440, 1969.

272-459 **Canada Geological Survey.** Aeromagnetic series, Swan Lake, Manitoba: Canada Geol. Survey Geophysics Paper 7724, scale 1:253,440, 1969.

272-460 **Canada Geological Survey.** Aeromagnetic series, Norway House, Manitoba: Canada Geol. Survey Geophysics Paper 7739, scale 1:253,440, 1969.

272-461 **Canada Geological Survey.** Aeromagnetic series, The Pas, Manitoba-Saskatchewan: Canada Geol. Survey Geophysics Paper 7741, scale 1:253,440, 1969.

272-462 **Canada Geological Survey.** Aeromagnetic series, Whitesail Lake, British Columbia: Canada Geol. Survey Geophysics Paper 7750, scale 1:253,440, 1969.

272-463 **Canada Geological Survey.** Aeromagnetic series, Smithers, British Columbia: Canada Geol. Survey Geophysics Paper 7760, scale 1:253,440, 1969.

72-464 **Canada Geological Survey.** Aeromagnetic series, Kluane Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 7827, scale 1:253,440, 1969.

72-465 **Canada Geological Survey.** Aeromagnetic series, Sheldon Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 7838, scale 1:253,440 [1969,].

72-466 **Canada Geological Survey.** Aeromagnetic series, Tay River, Yukon Territory: Canada Geol. Survey Geophysics Paper 7839, scale 1:253,440 [1969,].

72-467 **Canada Geological Survey.** Aeromagnetic series, Snag, Yukon Territory: Canada Geol. Survey Geophysics Paper 7840, scale 1:253,440, 1969.

272-468 **Canada Geological Survey.** Aeromagnetic series, Niddery Lake, Yukon Territory: Canada Geol. Survey Geophysics Paper 7852, scale 1:253,440 [1969,].

272-469 **Canada Geological Survey.** Aeromagnetic series, Lansing, Yukon Territory: Canada Geol. Survey Geophysics Paper 7853, scale 1:253,440 [1969,].

272-470 **Canada Geological Survey.** Aeromagnetic series, Stewart River, Yukon Territory: Canada Geol. Survey Geophysics Paper 7854, scale 1:253,440, 1969.

272-471 **Canada Geological Survey.** Aeromagnetic series, Dawson, Yukon Territory: Canada Geol. Survey Geophysics Paper 7868, scale 1:253,440, 1969.

272-472 **Canada Geological Survey.** Aeromagnetic series, Polar continental Shelf, Cape M'Clure, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 8071, scale 1:253,440, 1969.

272-473 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Gore Islands, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 8072, scale 1:253,440, 1969.

272-474 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheet 108 E, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 8073, scale 1:253,440, 1969.

272-475 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Dyer Bay, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 8089, scale 1:253,440, 1969.

272-476 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheets 98 G, 108 H, 108 G, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Papers 8090-8092, scale 1:253,440, 1969.

272-477 **Canada Geological Survey.** Aeromagnetic series, Polar continental shelf, Sheet 109 C, District of Franklin, Northwest Territories: Canada Geol. Survey Geophysics Paper 8122 (2d edition), scale 1:253,440, 1969; originally published 1968.

273-416 **Canada Geological Survey.** Aeromagnetic series, Rivière Mannerelle, Quebec: Canada Geol. Survey Geophysics Paper 5351, scale 1:63,360, 1969.

273-417 **Canada Geological Survey.** Aeromagnetic series, Rivière Harricana, Quebec: Canada Geol. Survey Geophysics Paper 5352, scale 1:63,360, 1969.

273-418 **Canada Geological Survey.** Aeromagnetic series, Lac Salomon, Quebec: Canada Geol. Survey Geophysics Paper 5353, scale 1:63,360, 1969.

273-419 **Canada Geological Survey.** Aeromagnetic series, Lac René, Quebec: Canada Geol. Survey Geophysics Paper 5359, scale 1:63,360, 1969.

273-420 **Canada Geological Survey.** Aeromagnetic series, Lac des Nogeau, Quebec: Canada Geol. Survey Geophysics Paper 5360, scale 1:63,360, 1969.

273-421 **Canada Geological Survey.** Aeromagnetic series, Rivière Missisicabi, Quebec: Canada Geol. Survey Geophysics Paper 5361, scale 1:63,360, 1969.

273-422 **Canada Geological Survey.** Aeromagnetic series, Lac Paul-Sauvé, Quebec: Canada Geol. Survey Geophysics Paper 5362, scale 1:63,360, 1969.

273-423 **Canada Geological Survey.** Aeromagnetic series, Lac Lucie, Quebec: Canada Geol. Survey Geophysics Paper 5363, scale 1:63,360, 1969.

273-424 **Canada Geological Survey.** Aeromagnetic series, Rivière Kitchigama, Quebec: Canada Geol. Survey Geophysics Paper 5364, scale 1:63,360, 1969.

273-425 **Canada Geological Survey.** Aeromagnetic series, Rivière Lepallier, Quebec: Canada Geol. Survey Geophysics Paper 5365, scale 1:63,360, 1969.

273-426 **Canada Geological Survey.** Aeromagnetic series, Lac Bouchier, Quebec: Canada Geol. Survey Geophysics Paper 5366, scale 1:63,360, 1969.

273-427 **Canada Geological Survey.** Aeromagnetic series, Lac Maurice, Quebec: Canada Geol. Survey Geophysics Paper 5367, scale 1:63,360, 1969.

273-428 **Canada Geological Survey.** Aeromagnetic series, Rivière Nottaway, Quebec: Canada Geol. Survey Geophysics Paper 5368, scale 1:63,360, 1969.

273-429 **Canada Geological Survey.** Aeromagnetic series, Lac Chaboullié, Quebec: Canada Geol. Survey Geophysics Paper 5369, scale 1:63,360, 1969.

273-430 **Canada Geological Survey.** Aeromagnetic series, Lac Soscumica, Quebec: Canada Geol. Survey Geophysics Paper 5370, scale 1:63,360, 1969.

273-431 **Canada Geological Survey.** Aeromagnetic series, Rivière Muskiki, Quebec: Canada Geol. Survey Geophysics Paper 5371, scale 1:63,360, 1969.

273-432 **Canada Geological Survey.** Aeromagnetic series, Lac Ouagama, Quebec: Canada Geol. Survey Geophysics Paper 5372, scale 1:63,360, 1969.

273-433 **Canada Geological Survey.** Aeromagnetic series, Lac Dana, Quebec: Canada Geol. Survey Geophysics Paper 5373, scale 1:63,360, 1969.

273-434 **Canada Geological Survey.** Aeromagnetic series, Lac Poncheville, Quebec: Canada Geol. Survey Geophysics Paper 5374, scale 1:63,360, 1969.

273-435 **Canada Geological Survey.** Aeromagnetic series, Lac Opataouaga, Quebec: Canada Geol. Survey Geophysics Paper 5375, scale 1:63,360, 1969.

273-436 **Canada Geological Survey.** Aeromagnetic series, Lac Salamandre, Quebec: Canada Geol. Survey Geophysics Paper 5376, scale 1:63,360, 1969.

273-437 **Canada Geological Survey.** Aeromagnetic series, Lac Evans, Quebec: Canada Geol. Survey Geophysics Paper 5377, scale 1:63,360, 1969.

273-438 **Canada Geological Survey.** Aeromagnetic series, Lac Persevil, Quebec: Canada Geol. Survey Geophysics Paper 5378, scale 1:63,360, 1969.

273-439 **Canada Geological Survey.** Aeromagnetic series, Lac Amisquioumisca, Quebec: Canada Geol. Survey Geophysics Paper 5379, scale 1:63,360, 1969.

273-440 **Canada Geological Survey.** Aeromagnetic series, Lac Rocher, Quebec: Canada Geol. Survey Geophysics Paper 5380, scale 1:63,360, 1969.

273-441 **Canada Geological Survey.** Aeromagnetic series, Lac Théodat, Quebec: Canada Geol. Survey Geophysics Paper 5381, scale 1:63,360, 1969.

273-442 **Canada Geological Survey.** Aeromagnetic series, Lac Caupichigau, Quebec: Canada Geol. Survey Geophysics Paper 5382, scale 1:63,360, 1969.

73-443 **Canada Geological Survey.** Aeromagnetic series, Lac Capichigamau, Quebec: Canada Geol. Survey Geophysics Paper 5383, scale 1:63,360, 1969.

73-444 **Canada Geological Survey.** Aeromagnetic series, Lac Lerac, Quebec: Canada Geol. Survey Geophysics Paper 5384, scale 1:63,360, 1969.

73-445 **Canada Geological Survey.** Aeromagnetic series, Lac Deriares, Quebec: Canada Geol. Survey Geophysics Paper 5385, scale 1:63,360, 1969.

273-446 **Canada Geological Survey.** Aeromagnetic series, Lac Dumas, Quebec: Canada Geol. Survey Geophysics Paper 5386, scale 1:63,360, 1969.

273-447 **Canada Geological Survey.** Aeromagnetic series, Lac Comencho, Quebec: Canada Geol. Survey Geophysics Paper 5387, scale 1:63,360, 1969.

273-448 **Canada Geological Survey.** Aeromagnetic series, Lac Assinica, Quebec: Canada Geol. Survey Geophysics Paper 5388, scale 1:63,360, 1969.

273-449 **Canada Geological Survey.** Aeromagnetic series, Lac Augrat, Quebec: Canada Geol. Survey Geophysics Paper 5389, scale 1:63,360, 1969.

273-450 **Canada Geological Survey.** Aeromagnetic series, Lac Opataca, Quebec: Canada Geol. Survey Geophysics Paper 5390, scale 1:63,360, 1969.

273-451 **Canada Geological Survey.** Aeromagnetic series, Lac Regnault, Quebec: Canada Geol. Survey Geophysics Paper 5391, scale 1:63,360, 1969.

273-452 **Canada Geological Survey.** Aeromagnetic series, Lac Troïlus, Quebec: Canada Geol. Survey Geophysics Paper 5392, scale 1:63,360, 1969.

273-453 **Canada Geological Survey.** Aeromagnetic series, Baie Pénicouane, Quebec: Canada Geol. Survey Geophysics Paper 5393, scale 1:63,360, 1969.

273-454 **Canada Geological Survey.** Aeromagnetic series, Lac Artaud, Quebec: Canada Geol. Survey Geophysics Paper 5394, scale 1:63,360, 1969.

273-455 **Canada Geological Survey.** Aeromagnetic series, Lac Bueil, Quebec: Canada Geol. Survey Geophysics Paper 5395, scale 1:63,360, 1969.

274-395 **Canada Geological Survey.** Aeromagnetic series, Edmundston, New Brunswick (2d edition): Canada Geol. Survey Geophysics Paper 7070, scale 1:253,440, revised 1969; originally published 1965.

274-396 **Canada Geological Survey.** Aeromagnetic series, Rimouski, Quebec: Canada Geol. Survey Geophysics Paper 7079, scale 1:253,440, 1969.

274-397 **Canada Geological Survey.** Aeromagnetic series, Baie-Comeau, Quebec: Canada Geol. Survey Geophysics Paper 7093, scale 1:253,440, 1969.

274-398 **Canada Geological Survey.** Aeromagnetic series, Gaspé, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 7345, scale 1:253,440, 1969.

274-399 **Canada Geological Survey.** Aeromagnetic series, Matane, Quebec-New Brunswick: Canada Geol. Survey Geophysics Paper 7346, scale 1:253,440, 1969.

274-400 **Canada Geological Survey.** Aeromagnetic series, Port-Menier, Quebec: Canada Geol. Survey Geophysics Paper 7353, scale 1:253,440, 1969.

274-401 **Canada Geological Survey.** Aeromagnetic series, Cap-Chat, Quebec: Canada Geol. Survey Geophysics Paper 7354, scale 1:253,440, 1969.

275-166 **Canada Geological Survey.** Report of activities—Pt. B, November 1967 to March 1968: Canada Geol. Survey Paper 68-1, pt. B, 89 p., illus., tables, 1968.

269-537 **Canada Gnlogical Survey.** Aeromagnetic series, Sheet 76 O/5 and 76 O/6, District of Mackenzie, Northwest Territories: Canada Geol. Survey Geophysics Paper 4547, scale 1:63,360, 1968.

270-488 **Canadian Well Logging Society.** Second formation evaluation symposium, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., paged separately, illus., tables, 1968.

269-258 **Canaple, J.; Laherrere, J.** Petroleum exploration techniques and methods used by F.P.C.(A) in Australia, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 306-330, illus., tables, 1967.

269-239 **Caner, B.; Auld, D. R.** Magneto-telluric determination of upper mantle conductivity structure at Victoria, British Columbia: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1209-1220, illus., 1968.

265-044 **Cantagrel, Jean-Marie.** Mesures sur "roche totale" par la méthode a l'argon des âges de quelques granites du Massif Central français ["Total-rock" measurements of the ages of some granites from the French Massif Central by the argon method]: Acad. Sci. Comptes Rendus, Series D, v. 266, no. 17, p. 1687-1690, table, 1968.

269-100 **Cantelaube, Y.; Maurette, M.; Pellas, P.** Traces d'ions Lourds dans les mineraux de la chondrite de Saint Severin [Heavy ion tracks in the minerals of the Saint Severin chondrite (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 215-229, illus., table, 1967.

267-258 **Canziani, R.** Anomalie di gravita' su sacche bauxitiche [Gravity anomaly over bauxite deposits (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 195-203, illus., tables, 1968.

275-087 **Capon, J.; Greenfield, R. J.; Lacoss, R. T.** Long-period signal processing results for the large aperture seismic array: Geophysics, v. 34, no. 3, p. 305-329, illus., tables, 1969.

265-186 **Caputo, Michele.** Estimates of anelastic dissipation in the Earth's torsional modes: Annali Geofisica, v. 19, no. 1, p. 75-94, illus., tables, 1966.

265-188 **Caputo, Michele.** Linear models of dissipation whose Q is almost frequency independent: Annali Geofisica, v. 19, no. 4, p. 383-393, 1966.

274-264 **Caputo, Michele; Pieri, L.** The normal gravity formula and the polar flattening according to geodetic reference system 1967: Annali Geofisica, v. 21, no. 1, p. 123-149, table, 1968.

267-442 **Carabelli, E.** Circuiti per misure di paleomagnetismo delle rocce [Circuits for measuring the paleomagnetism of rocks (with English abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 101-106, illus., 1968.

267-625 **Carabelli, E.** L'impiego del carotaggio sonico nell'esplorazione delle rocce di fondazione [The use of sonic logging in the exploration of foundation rocks (with English abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 91-100, illus., 1968.

264-560 **Carapezza, Marcello.** Un esempio di eruzione laterale da faglia nell'apparato eruttivo etneo [An example of lateral eruption from a fault of Etna Volcano (with English summ.)]: Acta Geol. Alpina, no. 8, p. 249-276, illus., 1962.

Carbonnell, M. *See* Bauer, A. 268-251

68-252 **Carbonnell, M.** Exploitation des couvertures photographiques aériennes répétées du front des glaciers vêlant dans Disko Bugt et Umanak Fjord, Juin-Juillet 1964—[Pt.] 1, Nouvelles mesures photogrammétriques de la vitesse superficielle des glaciers du Groenland [Use of repeated airphoto coverage of the front of glaciers calving into Disko Bugt and Umanak Fjord, June-July 1964—[Pt.] 1, New photogrammetric measurements of the velocity of glaciers of Greenland (with English abs.)]: Medd. om Gronland, v. 173, no. 5, p. 1-53, illus., tables, 1968.

68-115 **Carder, Dean S.** Reservoir loading and local earthquakes, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 225-241, illus., 1968.

264-344 **Cardús, J. O.** Nota relativa a la actividad solar, geomagnetica i ionosferica [Note relative to solar, geomagnetic, and ionospheric activity]: Rev. Geofísica, v. 26, nos. 101-102, p. 79-88, tables, 1967.

265-412 **Cardús, J. O.** Nota relativa a la actividad solar, geomagnetica e ionosferica [Note concerning solar, geomagnetic, and ionospheric activity]: Rev. Geofisica, v. 25, no. 98, p. 127-136, tables, 1966.

265-144 **Careaga, Jose P.** Spectral changes of surface waves along a path, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 55-61, illus., tables, 1966.

Carleton, B. J. *See* Nagata, T. 268-414

Carleton, B. J. *See* Nagata, T. 275-334

273-102 **Carlson, A. E., Jr.; Helmsen, M.** Validity of topography representation by truncated series of surface harmonics: Icarus, v. 10, no. 1, p. 57-65, illus., 1969.

Carlson, R. C. *See* Hearst, J. R. 274-466

Carmichael, C. M. *See* Lilley, F. E. M. 265-183

268-419 **Carmichael, R. S.** Stress control of magnetization in magnetite and nickel, and implications for rock magnetism: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 187-196, illus., table, 1968.

270-485 **Carothers, James E.** A statistical study of the formation factor relation: Log Analyst, v. 9, no. 5, p. 13-20, illus., 1968.

271-189 **Carr, Jerome B.** When did mantle convection cease,: Tectonophysics, v. 6, no. 5, p. 413-424, table, 1969.

273-077 **Carrigy, Maurice A.** Evidence of shock metamorphism in rocks from the Steen River structure, Alberta, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 367-374, illus., table, 1968.

269-692 **Carroll, Roderick D.** Velocity-porosity logging in volcanic rocks: Jour. Petroleum Technology, v. 20, no. 12, p. 1371-1374, illus., table, 1968.

271-565 **Carroll, Roderick D.** Applications of inhole geophysical logs in volcanic rocks, Nevada Test Site, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 125-134, illus., 1968.

271-279 **Carrozzo, M. T.; Mosetti, F.** Filtering of Bouguer map and frequency distribution of gravimetric anomalies in northern Italy [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 267-280, illus., tables, 1968.

271-284 **Carrozzo, M. T.** Indirect interpretation method of gravimetric and magnetic anomalies by electronic computer [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 341-350, illus., table, 1968.

270-351 **Carson, Bobb; McManus, Dean A.** Seismic reflection profiles across Juan de Fuca canyon: Jour. Geophys. Research, v. 74, no. 4, p. 1052-1060, illus., 1969.

Carter, N. C. *See* White, William H. 275-011

264-040 **Carter, N. L.; Raleigh, C. B.; DeCarli, P. S.** Deformation of olivine in stony meteorites: Jour. Geophys. Research, v. 73, no. 16, p. 5439-5461, illus., table, 1968.

273-083 **Carter, Neville L.** Dynamic deformation of quartz, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 453-474, illus., 1968.

75-394 **Carter, Neville L.; Raleigh, C. Barry.** Principal stress directions from plastic flow in crystals: Geol. Soc. America Bull., v. 80, no. 7, p. 1231-1264, illus., 1969.

67-160 **Cartwright, Keros; McComas, Murray R.** Geophysical surveys in the vicinity of sanitary landfills in northeastern Illinois: Ground Water, v. 6, no. 5, p. 23-30, illus., 1968.

70-229 **Cartwright, Keros.** Temperature prospecting for shallow glacial and alluvial aquifers in Illinois: Illinois Geol. Survey Circ. 433, 41 p., illus., tables, 1968.

73-166 **Casaverde, M.; Giesecke, A. A., Jr.; Salgueiro, R.; delPozo, S.; Tamayo, L.; Tuve, M. A.; Aldrich, L. T.** Studies of conductivity anomaly under the Andes: Carnegie Inst. Washington Year Book 67, p. 369-372, illus., table, 1969.

Casaverde, Mateo. *See* Giesecke, Alberto A. 269-406

Case, J. E. *See* Hedge, Carl E. 264-005

66-502 **Casertano, Lorenzo.** Sulla radioattività delle lave del vulcano Villarrica [On the radioactivity of the lava of Villarrica Volcano (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 15th Ann., Rome, 1966, Atti: Rome, Consiglio Nazionale Ricerche, p. 189-203, illus., tables [1967?].

6-560 **Casertano, Lorenzo.** I sismi vesuviani dal 1° Gennaio 1957 al 31 Dicembre 1964 [The Vesuvian earthquakes of January 1, 1957 to December 31, 1964 (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 16th Ann., Naples, 1967, Atti: Rome, Consiglio Nazionale Ricerche, p. 289-309, illus., tables, 1968.

Casertano, Lorenzo. *See* Imbo, Giuseppe. 270-450

0-020 **Cassidy, W. A.; Glass, B.; Heezen, B. C.** Physical and chemical properties of Australasian microtektites: Jour. Geophys. Research, v. 74, no. 4, p. 1008-1025, illus., tables, 1969.

Cassidy, William. *See* Dietz, Robert S. 275-036

3-061 **Cassidy, William A.** Meteorite impact structures at Campo del Cielo, Argentina, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 117-128, illus., 1968.

Cassidy, William A. *See* Bunch, T. E. 273-093

Castillo V., Juan. *See* Huaco O., Daniel. 274-109

7-292 **Cataldi, R.; Stefani, G.; Tongiorgi, M.** Geology of Larderello region (Tuscany)—Contribution to the study of the geothermal basins, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 235-265, illus., [1967].

-011 **Catanzaro, E. J.** The interpretation of zircon ages, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 225-258, illus., tables, 1968.

Cathles, Lawrence M. *See* Phinney, Robert A. 271-113

-173 **Cattermole, Peter.** The nature and origin of the lunar maria: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 109-115, illus., 968.

-158 **Caye, J. P.** The Timor Sea-Sahul shelf area: APEA Jour., v. 8, pt. 2, p. 35-41, illus., tables, 1968.

-280 **Ceccherini, P. T.; Finetti, I.** Density computation problem of compactible rocks for gravity reduction [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 281-289, illus., table, 1968.

265-338 **Čermák, Vladimír.** Heat flow in the Upper Silesian coal basin: Pure and Appl. Geophysics, v. 69, p. 119-130, illus., tables, 1968.

268-299 **Čermák, Vladimír.** Heat flow in the Kladno-Rakovník coal basin: Gerlands Beitr. Geophysik, v. 76, no. 6, p. 461-466, illus., tables, 1967.

268-301 **Čermák, Vladimír.** Terrestrial heat flow in Czechoslovakia and its relation to some geological features, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 75-85, illus., tables, 1968.

270-228 **Čermák, Vladimír; Kresl, Milan; Veselý, Ivan.** Experimental determination of the coefficient of heat transfer during hole boring and the re-establishment of the temperature field equilibrium: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 153-158, illus., tables, 1969.

272-228 **Čermák, Vladimír; Krešl, Milan.** Thermal conductivity of rocks and its measurement on the divided-bar apparatus [with Czech and Russian abs.]: Ceskoslovenská Akad. Věd Geofys. Sborník 1967, v. 15, p. 287-304, illus., table, 1968.

272-229 **Čermák, Vladimír.** Terrestrial heat flow in eastern Slovakia [with Czech and Russian abs.]: Ceskoslovenská Akad. Věd Geofys. Sborník 1967, v. 15, p. 305-319, illus., tables, 1968.

272-234 **Čermák, Vladimír.** Der Wärmefluss in der CSSR und sein Zusammenhang mit Tiefstrukturen [Heat flow in Czechoslovakia and its relationship with deep structures]: Freiberger Forschungshefte C 238, p. 25-32, illus., tables, 1968.

274-278 **Čermák, Vladimír; Krčmář, Břetislav.** Měření tepelného toku na dvou šachtách v západních a jižních Čechách [Heat flow measurements in West and South Bohemia (with English summ.)]: [Czechoslovakia] Ústřed. Ústav. Geol. Věstník, v. 43, no. 6, p. 415-422, illus., tables, 1968.

272-150 **Červený, Vlastislav.** The theory of reflected and head waves in the case of a layered overburden [with Czech and Russian abs.]: Ceskoslovenaká Akad. Věd Geofys. Sborník 1967, v. 15, p. 133-180, illus., 1968.

272-151 **Červený, Vlastislav; Mádr, Ivo.** Amplitude curves of reflected and head waves for some simple models of medium [with Czech and Russian abs.]: Ceskoslovenská Akad. Věd Geofys. Snorník 1967, v. 15, p. 181-203, illus., table, 1968.

273-375 **Chadwick, Robert A.** Geologic and paleomagnetic relationships in the Gallatin Range and adjacent Yellowstone Valley, *in* Structures and origin of volcanic rocks, Montana-Wyoming-Idaho—Natl. Sci. Found. Summer Course 1968, Guidebook: Detroit, Mich., Wayne State Univ., p. 45-48, illus., revised 1968; originally published 1965.

Chagayev, A. Ya. *See* Morozov, S. G. 270-512

272-292 **Chalov, P. I.; Merkulova, K. I.** Vliyaniye protsessov okisleniya na razdeleniye izotopov urana pri ikh vyshchelachivanii iz mineralov [Effect of oxidation processes on the fractionation of uranium isotopes during their leaching from minerals]: Geokhimiya, no. 7, p. 872-876, tables, 1968.

266-469 **Chamalaun, F. H.; Porath, H.** A continuous thermal demagnetizer for rock magnetism: Pure and Appl. Geophysics, v. 70, no. 2, p. 105-109, illus., 1968.

Chamaulaun, F. H. *See* McDougall, Ian. 275-004

271-035 **Chamberlain, Von Del.** Meteorites of Michigan: Michigan Geol. Survey Bull. 5 42 p., illus., 1968.

Chamo, S. S. *See* Rezanov, I. A. 273-323

269-184 **Chandler, Ramesh; Alsop, L. E.; Oliver, Jack.** On the synthesis of shear-ccoupled PL waves: Seismol. Soc. America Bull., v. 58, no. 6, p. 1849-1877, illus., tables, 1968.

275-303 **Chandra, S.; Herman, J. R.** F-region ionization and heating during magnetic storms: Planetary and Space Sci., v. 17, no. 5, p. 841-851, illus., tables, 1969.

272-137 **Chandra, Umesh.** The exact solution for the displacement components in $P_1P_2P_1$, $(S_1S_2S)_{SV}$, $(S_1S_2S_1)_{SH}$ head waves due to an impulsive double couple source: Seismol. Soc. America Bull., v. 59, no. 1, p. 317-330, illus., 1969.

Chang, C. C. *See* Lee, C. H. 274-268

Chang, Chung Chin. *See* Kim, Chong Su. 267-262

Chang, M. H. *See* Lee, C. H. 274-268

268-146 **Chanturishvili, L. S.** O svyazi mezhdu elektricheskimi i mekhanicheskimi parametrami gornykh porod v kore Zemli [On the relationship between the electrical and mechanical parameters of rocks in the Earth's crust], *in* Simposium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 161-164, 1968.

267-071 **Chao, E. C. T.** Pressure and temperature histories of impact metamorphosed rocks—Based on petrographic observations: Neues Jahrb. Mineralogie Abh., v. 108, no. 3, p. 209-246, illus., 1968.

73-063 **Chao, E. C. T.** Pressure and temperature histories of impact metamorphosed rocks—Based on petrographic observations, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 135-158, illus., 1968.

Chapin, Charles E. *See* Epis, Rudy C. 267-007

65-313 **Chapman, Rodger H.; Bishop, Charles C.** (compilers). Bouguer gravity map of California—San Francisco sheet: San Francisco, Calif., California Div. Mines and Geology, scale 1:250,000, separate text, 1968.

67-253 **Chapman, Rodger H.; Bishop, Charles C.** (compilers). Bouguer gravity map of California—Alturas sheet: San Francisco, Calif., California Div. Mines and Geology, scale 1:250,000, separate text, 1968.

Chapman, S. *See* Kendall, P. C. 274-320

Chapman, S. L. *See* Syers, J. K. 265-369

65-400 **Chapman, Sydney.** Historical introduction to aurora and magnetic storms [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 497-505, 1968.

Chapman, Sydney. *See* Gupta, Jagdish C. 270-263

74-325 **Chapman, Sydney; Gupta, Jagdish Chandra.** Notes on the computation of the solar and lunar daily magnetic variation of X and Y from hourly or bihourly values of H and declination: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 103-114, tables, 1969.

66-538 **Chapple, William M.** The analysis of strain in deformed rocks—Discussion [of Hobbs, B. E., and Talbot, J. L., 1966, Jour. Geology, v. 74, p. 500-513]: Jour. Geology, v. 76, no. 4, p. 491-494, illus., 1968.

72-061 **Charalambus, S.; Goebel, L.; Stotzel-Riezler, W.** Tritium and argon-39 in stone and iron meteorites: Zeitschr. Naturforschung, v. 24a, no. 2, p. 234-244, illus., tables, 1969.

Charbonneau, B. W. *See* Morley, L. W. 265-458

Charbonneau, B. W. *See* MacLaren, A. S. 268-431

Charbonneau, Brian W. *See* MacLaren, A. S. 267-459

268-011 **Chard, Chester S.; Powers, Roger.** Soviet archaeological radiocarbon dates, [Pt.] 3: Arctic Anthropology, v. 5, no. 1, p. 224-233, 1968.

273-245 **Charlesworth, H. A. K.** Some observations on the age of jointing in macroscopically folded rocks, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 125-134, illus., table; discussion, p. 134-135, 1969.

Charm, W. *See* Lidz, L. 272-494

Charm, Walter B. *See* Lidz, Louis. 273-489

Charygin, M. M. *See* Vasil'yev, Yu. M. 269-355

Chase, A. E. *See* Dorin, A. H. 270-498

271-177 **Chase, Richard L.; Bunce, Elizabeth T.** Underthrusting of the eastern margin of the Antilles by the floor of the western North Atlantic Ocean, and origin of Barbados Ridge: Jour. Geophys. Research, v. 74, no. 6, p. 1413-1420, illus., 1969.

270-173 **Chashnik, V. M.** Novyye geofizicheskiye pribory, razrabotannyye OKB MG SSSR [New geophysical instruments developed by the Special Construction Bureau of the Ministry of Geology of the U.S.S.R.]: Geofiz. Apparatura, no. 36, p. 5-9, illus., 1968.

271-069 **Chaterji, G. C.** Koyna earthquake: Indian Geophys. Union Jour., v. 5, no. 1, p. 35-36, 1968.

Chatterji, S. *See* Kerridge, J. F. 267-061

265-033 **Chatters, Roy M.** Washington State University natural radiocarbon measurements I: Radiocarbon, v. 10, no. 2, p. 479-498, tables, 1968.

267-293 **Chaudhary, D. R.; Bhandari, R. C.** Effective thermal conductivity of two-phase granular materials: Indian Jour. Pure and Appl. Physics, v. 6, no. 6, p. 274-279, illus., 1968.

274-151 **Chaudhuri, B.** On magnetoelastic disturbances in an aelotropic elastic cylinder placed in a magnetic field: Pure and Appl. Geophysics, v. 73, p. 60-68, 1969.

274-152 **Chaudhuri, B.** Rayleigh-waves on cylindrical surfaces of aelotropic elastic material in a magnetic field: Pure and Appl. Geophysics, v. 73, p. 69-77, 1969.

274-153 **Chaudhuri, Bireswar Ray.** Torsional oscillation of a visco-elastic cylinder in a magnetic field: Pure and Appl. Geophysics, v. 73, p. 78-82, 1969.

Chaudhuri, S. *See* Faure, G. 269-003

268-005 **Chaudhuri, Sambhudas; Faure, Gunter.** Rubidium-strontium age of the Mount Bohemia intrusion of Michigan: Jour. Geology, v. 76, no. 4, p. 488-490, illus., 1968.

273-004 **Chaudhuri, Sambhudas; Brookins, Douglas G.** The isotopic age of the Flathead Sandstone (Middle Cambrian), Montana: Jour. Sed. Petrology, v. 39, no. 1, p. 364-366, illus., tables, 1969.

270-209 **Chauris, Louis.** Gravimetrie et metallogenie granitique dans le Massif Armoricain [Gravimetry and granitic metallogeny in the Massif Armoricain], *in* Contribution de la carte gravimetrique a la geologie du Massif Armoricain: [France] Bur. Recherches Geol. et Minieres Mem., no. 52, p. 43-54, illus., 1967.

270-210 **Chauris, Louis.** Les grandes lignes du Pays de Leon (Finistere) et la gravimetrie [The great lineaments of Pays de Leon (Finistere) and gravimetry], *in* Contribution de la carte gravimetrique a la geologie du Massif Armoricain: [France] Bur. Recherches Geol. et Minieres Mem., no. 52, p. 55-63, 1967.

Chayka, V. M. *See* Bibikova, Ye. V. 267-045

275-287 **Chebotarev, G. M.; Vinogradov, V. I.** Ob izotopnom sostave sery svintsovo-tsinkovykh mestorozhdeniy Uchkulachskogo rudnogo polya (Srednyaya Aziya) [On the isotopic composition of the sulfur of the lead-zinc deposits of the Uchkulach ore field (Central Asia)], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 110-114, illus., table, 1967.

265-062 **Chedzhemov, G. Kh.** Integral'nyy metod pryamogo mass-spektrometricheskogo izmereniya radiogennogo argona v mineralakh [Direct mass-spectrometric determination of radiogenic argon in minerals], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 64-78, illus., 1967.

267-326 **Chekunov, A. V.** Poverkhnya Mokhorovychycha ta deyakī osnovnī rysy glybynnoyi budovy zemnoyi kory Ukrayiny ī sumīzhnykh rehīoniv [The Mohorovicic surface and some fundamental features of deep crustal structure of the Ukraine and adjacent regions (in Ukrainian with Russian summ.)]: Akad. Nauk Ukrayin. RSR Heol. Zhur., v. 27, no. 2, p. 3-18, illus., 1967.

267-328 **Chekunov, A. V.** Poverkhnya Konrada ī deyakī osnovnī rysy budovy ta evolyutsiyi zemnoyi kory Ukrayiny y sumīzhnykh rehīonīv [The Conrad surface and some fundamental features of the structure and evolution of the Earth's crust in the Ukraine and adjacent regions (in Ukrainian with Russian summ.)]: Akad. Nauk Ukrayin. RSR Heol. Zhur., v. 27, no. 5, p. 96-111, illus., 1967.

Chekunov, A. V. *See* Subbotin, S. I. 268-333

269-369 **Chekunov, A. V.; Ćirić, B. M.; Prosen, D. I.; Slavin, V. I.; Sollogub, V. B.; Subbotin, S. I.** Investigation of the constitution of deep zones of the Earth's crust in the Carpatho-Balkanic and surrounding areas: [Yugoslavia] Zavod Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C, nos. 4-5, English edition, 1963-64, p. 5-12, illus., 1966.

Chekunov, A. V. *See* Subbotin, S. I. 269-372

270-199 **Chekunov, A. V.** Nekotoryye voprosy tektogeneza i evolyutsii zemnoy kory [Some problems of tectogenesis and evolution of the Earth's crust (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 72-88, illus., table, 1968.

Chekunov, A. V. *See* Sollogub, V. B. 270-401

275-387 **Chekunov, A. V.** Voprosy glubinnogo seysmozondirovaniya na III zasedenii KAPR [Problems of deep seismic sounding at the third session of KAPR]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 73-78, 1969.

Chelok'yan, R. S. *See* Mesropyan, V. S. 270-520

271-326 **Cheminée, J.; Létolle, René; Olive, P.** Premières donneés isotopiques sur des fumerolles de volcans italiens [First isotopic data on the fumaroles of Italian volcanoes]: Bull. Volcanol., v. 32, no. 3, p. 469-475, tables, 1969.

Chen, A. J. *See* Kavanagh, L. D., Jr. 265-378

265-023 **Cherdyntsev, V. V.; Alekseyev, V. A.; Kind, N. V.; Forova, V. S.; Sulerzhitskiy, L. D.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—

Geological Institute radiocarbon dates I: Radiocarbon, v. 10, no. 2, p. 419-425, 1968; originally published in Russian, 1964.

265-024 **Cherdyntsev, V. V.; Kind, N. V.; Zavel'skiy, F. S.; Forova, V. S.; Churikova, I. V.; Sulerzhitskiy, L. D.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Geological Institute radiocarbon dates III: Radiocarbon, v. 10, no. 2, p. 437-445, 1968; originally published in Russian, 1966.

267-036 **Cherdyntsev, V. V.; Alekseyev, V. A.; Kind, N. V.; Forova, V. S.; Zavel'skiy, F. S.; Sulerzhitskiy, L. D.; Forsenkova, I. V.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Geological Institute radiocarbon dates II: Radiocarbon, v. 10, no. 2, p. 426-436, 1968; originally published in Russian, 1965.

267-040 **Cherdyntsev, V. V.; Kuptsov, V. M.; Kuz'mina, Ye. A.; Zverev, V. L.** Radioizotopy i protaktiniyevyy vozrast neovulkanicheskikh porod Kavkaza [Radioisotopes and proctactinium age of the neovolcanic rocks of the Caucasus (with English summ.)]: Geokhimiya, no. 1, p. 77-85, illus., table, 1968.

267-370 **Cherdyntsev, V. V.; Zverev, V. L.; Kuptsov, V. M.; Kislitsina, G. I.** Plutoniy-239 v prirode [Plutonium-239 in nature (with English summ.)]: Geokhimiya, no. 4, p. 395-401, illus., tables, 1968.

Cherdyntsev, V. V. *See* Kadyrov, N. B. 267-371

269-282 **Chereau, J. Y.** Application of geophysics in the exploration of large areas, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: United Nations ECAFE Mineral Resources Devel. Series, no. 26, p. 432-440, illus., 1967.

269-334 **Chereau, J. Y.** Combined interpretation of gravity and magnetic data, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 464-477, illus., 1967.

Cherevko, T. N. *See* Tyurmina, L. O. 264-369

Cherginets, V. F. *See* Anan'yeva, Ye. M. 267-202

267-588 **Cherkashina, L. G.** Geologicheskoye stroyeniye Yarkimbayskoy ploshchadi po dannym seysmorazvedki [Geology of the Yarkimbay area according to seismic survey data]: Uzbek. Geol. Zhur., no. 3, p. 48-52, illus., 1968.

265-099 **Cherkasov, I. I.; Mikheyev, V. V.; Smorodinov, M. I.; Shvarev, V. V.; Zobachev, N. M.; Morozov, A. A.; Petrukhin, V. P.** Pryamoye opredeleniye struktury, plotnosti mekhanicheskikh svoystv gruntov Luny s pomoshch'yu avtomaticheskikh stantsiy [Direct determination of the structure, density, and mechanical properties of luna soils using automatic stations]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 3-14, il lus., table, 1968.

The apparatus and procedure for determining density, bearing strength, and struc ture of the surface layer of the Moon in the vicinity of the lunar stations Luna 13 Surveyor I, and Surveyor III are described briefly, and information obtained on the physical and mechanical features of the lunar soil obtained with these stations is sum marized.—D.B.V.

268-100 **Cherkasov, I. I.; Vakhnin, V. M.; Kemurjian, A. L.; Mikhailov, L. N.; Mikheyev V. V.; Musatov, A. A.; Smorodinov, M. I.; Shvarev, V. V.** Determination of the physi cal and mechanical properties of the lunar surface layer by means of Luna 13 auto matic station, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session o the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 70-76, il lus., 1968.

Chernov, A. P. *See* Zverev, P. N. 270-349

Chernov, G. M. *See* Vinogradov, A. P. 268-101

265-659 **Chernovskiy, M. I.; Derkevich, M. D.** K voprosu o sochlenenii vneyshney zony Predkarpatskogo progiba s Volyno-Podol'skoy okrainoy Russkoy platformy po dannym seysmorazvedki [On the problem of the junction of the outer zone of the Carpathian foreland depression with the Volyn-Podol'skiy margin of the Russian platform from seismic survey data]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 9, p. 3-9, illus., 1964.

Chernozemova, V. G. *See* Yegorov, Yu. M. 267-174

Chernyshev, I. V. *See* Shanin, L. L. 265-060

265-068 **Chernyshev, I. V.; Shanin, L. L.** Opredeleniye mikrokolichestv svintsa i urana metodom izotopnogo razbavleniya [Determination of microquantities of lead and uranium by the isotope dilution method], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 140-146, 1967.

Chernyshev, R. G. *See* Raykher, L. D. 266-525

Chernyshev, Yu. S. *See* Borodin, P. M. 264-430

Chernysheva, A. A. *See* Davidenko, F. K. 264-589

270-295 **Chernyuk, M. V.** Magnitnyye anomalii i nalednyye obrazovaniya v predelakh In''yali-Debinskogo sinklinoriya (Severo-Vostok SSSR) [Magnetic anomalies and frozen formations within the In''yali-Debin synclinorium (North-East U.S.S.R.) (with English summ., p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 80-86, illus., 1968.

Chernyy, A. V. *See* Karatayev, G. I. 268-268

268-291 **Chernyy, A. V.** O chislennom reshenii sistem lineynykh uravneniy s plokho obuslovlennymi matritsami voznikayushchikh iz prakticheskikh zadach interpretatsii gravitatsionnykh i magnitnykh anomaliy [On the numerical solution of systems of linear equations with poorly stipulated matrices arising from practical problems of interpretation of gravity and magnetic anomalies], *in* Prilozheniye nekotorykh metodov matematiki k interpretatsii geofizicheskikh dannykh: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologiya i Geofiziki (Izdatel'stvo "Nauka" Sibirskoye Otdeleniye), p. 114-132, 1967.

Chernyy, A. V. *See* Karatayev, G. I. 269-339

66-542 **Cherry, J. T.; Larson, D. B.; Rapp, E. G.** A unique description of the failure of a brittle material: Internat. Jour. Rock Nechanics and Mining Sci., v. 5, no. 5, p. 455-463, illus., 1968.

Chervonskiy, M. I. *See* Antipov, V. I. 265-660

Chervonskiy, M. I. *See* Rapoport, M. B. 266-523

66-524 **Chervonskiy, M. I.; Rapoport, M. B.; Seliverstov, B. P.; Osipenko, V. A.** Ispol'zovaniye perfokart v ustroystvakh nepreryvnogo deystviya dlya avtomaticheskoy obrabotki seysmogramm [Use of punch cards in continuously acting setups for automatic processing of seismograms], *in* Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 71-74, illus., 1967.

Chesnokov, A. D. See *Bragin, A. A. 266-573*

Chessex, R. See *Laurent, R. 269-043*

264-029 **Chessex, Ronald; Deleloye, Michel; Vuagnat, Marc.** Sur l'age de quelques zircons des Alpes du Sud et de l'Apennin [On the age of some zircons from the southern Alps and Apennines]: Soc. Italiana Mineralogia i Petrologia Rend., v. 24, no. 1, p. 19-28, tables, 1968.

273-188 **Chetayev, D. N.** O neobkhodimosti usloviya Lorentsa dlya potentsialov v izotropnykh sredakh [On the necessity of the Lorenz condition for the potentials in isotropic mediums]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 53-56, 1969.

Cheyney, Howard. See *Hansen, James E. 266-064*

Chibrikova, Ye. V. See *Morozov, S. G. 270-512*

Chibukhchyan, Z. O. See *Melikyan, L. S. 265-053*

Chibukhchyan, Z. O. See *Kazaryan, G. A. 275-032*

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Chikhradze, Sh. G. See *Kikinadze, D. A. 266-372*

265-429 **Chikovani, D. S.** Sq-variatsii geomagnitnogo polya v Dusheti za 1952-1964 god [Sq variations of the geomagnetic field at Dusheti during 1952-64]: Akad. Nauk Gru zin. SSR Inst. Geofiziki Trudy, v. 26, no. 1, p. 33-38, illus., table, 1966.

265-430 **Chikovani, D. S.** Ob izmenchivosti Sq-variatsiy [On the variability of Sq variations]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 26, no. 1, p. 39-43, illus., tables, 1966.

266-297 **Chinnery, Michael A.; Petrak, John A.** The dislocation fault model with a variable discontinuity: Tectonophysics, v. 5, no. 6, p. 513-529, illus., 1968.

275-110 **Chinnery, Michael A.** Theoretical fault models [with French abs.], *in* A symposium on processes in the focal region—Internat. Union Geodesy and Geophysics, 14t Gen. Assembly, Zurich, 1967: Dominion Observatory Ottawa Pubs., v. 37, no. 7, p 211-223, illus., tables, 1969.

275-264 **Chinnery, Michael A.** Velocity anomalies in the lower mantle: Physics and Planetary Interiors, v. 2, no. 1, p. 1-10, illus., 1969.

Chirvinskaya, M. V. See *Subbotin, S. I. 268-333*

Chirvinskaya, M. V. See *Subbotin, S. I. 269-372*

264-241 **Chizov, O. P.; Koryakin, V. S.; Davidovich, N. V.; Kanevskiy, Z. M.; Zinger, Y M.; Bazheva, V. Ya.; Bazhev, A. B.; Khmelevskoy, I. F.** Oledeneniye Novoy Zem [Glaciation of Novaya Zemlya]: Akad. Nauk SSSR Mezhduvedomst. Geofiz. Kom Rezultaty Issledovaniy po Programme Mezhdunarod. Geofiz. Goda, 9th Razdel. Programmy MGG, Glatsiologiya, no. 18, 338 p., illus., tables, 1968.

Chkhenkeli, Sh. M. See *Tsitsishvili, D. A. 266-235*

Cho, D. H. See *Koo, J. H. 274-379*

Cho, D. H. See *Baag, C. G. 274-380*

Cho, Kyu Jang. See *Kim, Chong Su. 267-262*

Cho, Kyu Jang. See *Kim, Chong Su. 267-462*

274-184 **Cho, Kyu Jang; Yang, Sung Chin.** The report on electrical prospecting at th Obock mine [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. E plor., v. 2, no. 1, p. 141-145, illus., table, 1968.

68-079 **Choate, R.; Batterson, S. A.; Christensen, E. M.; Hutton, R. E.; Jaffe, L. D.; Jones, R. H.; Ko, H. Y.; Spencer, R. L.; Sperling, F. B.** Lunar surface mechanical properties, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 77-133, illus., 1968.

75-072 **Choate, R.** (and others). Lunar surface mechanical properties, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 137-194, illus., 1969.

59-217 **Chojnicki, Tadeusz.** Badanie pływow skorupy ziemskiej [Investigation of crustal movements]: Przeglą. Geod., v. 39, no. 5, p. 188-192, illus., 1967.

55-367 **Choquette, Philip W.** Marine diagenesis of shallow marine lime-mud sediments—Insights from δO-18 and δC-13 data: Science, v. 161, no. 3846, p. 1130-1132, illus., table, 1968.

74-015 **Choubert, Boris.** Réflexions sur la finalité des mesures géochronologiques (périodicité des événements du Précambrien et dériv des continents) [Reflections on the finality of geochronologic measurements (periodicity of Precambrian events and continental drift)]: Soc. Géol. France Bull. 1967, ser. 7, v. 9, no. 6, p. 809-819, illus., tables, 1968.

74-120 **Chouhan, R. K. S.; Ramji.** Pn residuals and station corrections: Pure and Appl. Geophysics, v. 73, p. 129-133, illus., 1969.

6-113 **Chouhan, Ramkishore S.; Singh, C. L.; Singh, R. D.** A new measure of seismicity: Pure and Appl. Geophysics, v. 70, no. 2, p. 47-60, illus., tables, 1968.

4-239 **Choukroune, Pierre.** Un exemple d'analyse microtectonique d'une serie calcaire affectee de plis isopaques ("concentriques") [An example of microtectonic analysis of concentric folding in a limestone series (with English abs.)]: Tectonophysics, v. 7, no. 1, p. 57-70, illus., 1969.

1-158 **Chovitz, Bernard H.** Comments on paper by M. A. Khan, "A re-evaluation of the theory for the hydrostatic figure of the Earth" [1968]: Jour. Geophys. Research, v. 74, no. 6, p. 1711, 1969.

0-250 **Chow, Tsaihwa J.** Lead isotopes of the Red Sea region: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 143-147, illus., tables, 1969.

7-077 **Christensen, E. M.** (and others). Lunar surface mechanical properties: Jour. Geophys. Research, v. 73, no. 22, p. 7169-7192, illus., table, 1968.

Christensen, E. M. See *Choate, R. 268-079*

Christensen, M. N. See *Gilbert, C. M. 271-182*

3-320 **Christensen, N. I.; Crosson, R. S.** Seismic anisotropy in the upper mantle: Tectonophysics, v. 6, no. 2, p. 93-107, illus., tables, 1968.

-368 **Christensen, Nikolas I.** Chemical changes associated with upper mantle structure: Tectonophysics, v. 6, no. 4, p. 331-342, illus., tables, 1968.

Christensen, Nikolas I. See *Crosson, Robert S. 272-133*

Christiansen, Robert L. See *Noble, Donald C. 264-392*

-213 **Christoffel, D. A.; Linford, J. G.** The magnetotelluric method for locating major geological features and its application in the Wairarapa: New Zealand Jour. Geology and Geophysics, v. 11, no. 1, p. 66-77, illus., table, 1968.

Chudakova, L. N. See *Druzhinin, V. S. 273-468*

267-612 **Chujo, Junsuke.** About the scattering of ultrasonics of the bottom sonar and it records [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 18, no. 5, p 330-340, illus., 1967.

269-621 **Chujo, Junsuke.** Activity of sonic prospecting in Japan, *in* ECAFE Symposium 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 541-548 illus., tables, 1967.

268-361 **Chukhrov, F. V.; Vinogradov, V. I.; Yermilova, L. P.** K voprosu ob izotopnon fraktsionirovanii sery v proterozoye [On the problem of the isotopic fractionation o sulfur in the Proterozoic]: Akad. Nauk SSSR Izv. Ser. Geol., no. 11, p. 3-11, illus., ta bles, 1968.

275-277 **Chukhrov, F. V.** Ob izotopno-gidrogeokhimicheskikh metode poiskov skrytyk sul'fidnykh rud [On an isotope-geochemical method of prospecting for hidden sul fide ores]: Sovetskaya Geologiya, no. 1, p. 73-80, tables, 1969.

275-282 **Chukhrov, F. V.; Yermilova, L. P.; Vinogradov, V. I.** Izotopnyy sostav i proisk hozhdeniy sery nekotorykh molibdenovykh i volframovykh mestorozhdeniy Tser tral'nogo Kazakhstana [Isotopic composition and origin of the sulfur in some molyb denum and tungsten deposits of central Kazakhstan], *in* Izotopy sery i voprosy ru doobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozh deniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 46-58, illus., ta bles, 1967.

Chuklenkova, I. N. See *Setunskaya, L. Ye. 271-247*

Chumachenko, P. See *Bonchev, E. 272-116*

273-141 **Chung, D. H.; Simmons, Gene.** Elastic properties of polycrystalline periclase Jour. Geophys. Research, v. 74, no. 8, p. 2133-2135, tables, 1969.

Chuprunova, O. V. See *Aksent'yeva, Z. N. 266-167*

266-169 **Chuprunova, O. V.** Nekotoryye osobennosti v dvizhenii gorizontal'nykh maya nikov na zemnoprilivnoy stantsii "Simferopol'" [Some features in the motion of th horizontal pendulums at the Simferopol earth tide station (with English summ.) Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i A tronomiya, no. 11, p. 185-189, illus., table, 1967.

Churayev, I. V. See *Alekseyev, F. A. 272-481*

Churikova, I. V. See *Cherdyntsev, V. V. 265-024*

Churinova, I. M. See *Vayntsvayg, M. N. 269-703*

273-466 **Churlin, V. V.** Otsenka velichiny bazy summirovaniya otrazhennyk seysmicheskikh voln [Estimation of the value of the base of summation of reflecte seismic waves]: Neftegazovaya Geologiya i Geofizika, no. 12, p. 29-34, illus., table 1968.

Churmanteyeva, M. N. See *Pankina, R. G. 269-380*

Churmanteyeva, M. N. See *Mekhtiyeva, V. L. 275-294*

Chutko, Ye. B. See *Karpinskaya, N. N. 264-590*

264-593 **Chutko, Ye. B.; Shmekker, M. S.** Korrelyatsionnyye repery triasovykh i verk nepermskikh otlozheniy yugo-vostochnoy chasti Dneprovsko-Donetskoy vpadi [Correlation of marker horizons in the Triassic and Upper Permian formations of th southeastern part of the Dnieper-Donets basin]: Ukrain. Nauchno-Issled. Geo Razved. Inst. Trudy, no. 13, p. 136-143, illus., 1965.

264-594 **Chutko, Ye. B.; Shmekker, M. S.** O vozraste i usloviyakh zaleganiya porod korenevskoy svity v yugo-vostochnoy chasti Dneprovsko-Donetskoy vpadiny [On the age and conditions of emplacement of the rocks of the Korenev suite in the southeastern part of the Dnieper-Donets basin]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 13, p. 144-151, illus., 1965.

Chuykov, A. F. See *Omes', S. P. 269-708*

274-071 **Chuykova, N. A.** Gravitatsionnoye pole i figura Luny [The gravity field and the figure of the Moon (with English summ.)]: Astron. Zhur., v. 45, no. 6, p. 1293-1302, illus., tables, 1968.

269-065 **Chwaszczewska, J; Przyborski, W.; Roman, J.; Sapa, M.** Low-background counting with silicon detectors, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 711-720, illus., tables, 1967.

265-444 **Cialdea, R.** Un nuovo tipo di magnetometro per le misure magnetiche sulle rocce [A new type of magnetometer for magnetic measurements on rocks (with English summ.)]: Annali Geofisica, v. 19, no. 4, p. 399-414, illus., 1966.

274-364 **Cialdea, R.** La misura della disomogeneita di magnetizzaione delle rocce [The measurement of the inhomogeneity of rock magnetization (with English summ.)]: Annali Geofisica, v. 21, no. 1, p. 1-14, illus., 1968.

Cianciara, Bogdan. See *Fajklewica, Zbigniew. 275-236*

Ciocanelea, R. See *Tudose, Elvira. 273-395*

65-302 **Ciocârdel, R.; Socolescu, M.; Esca, Al.; Teodorescu, C.** Movements verticaux actuels de l'écorce terrestre dans le bassin de la mer Noire et les aires avoisinantes [Current vertical movements of the Earth's crust in the basin of the Black Sea and neighboring areas]: Rev. Roumaine Géologie, Géophysique, Géographie, Sér. Géophysique, v. 12, no. 1, p. 17-21, illus., 1968.

Cirić, B. M. See *Chekunov. A. V. 269-369*

Cisternas, A. See *Olea M., R. 273-319*

Clabaugh, S. E. See *Wilson, John Andrew. 264-014*

64-550 **Clacy, G. R. T.** Geothermal ground noise amplitude and frequency spectra in the New Zealand volcanic region: Jour. Geophys. Research, v. 73, no. 16, p. 5377-5383, illus., 1968.

72-331 **Cladis, J. B.** Dynamical motion of geomagnetic flux tube resulting from injection of high-energy particles, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York and Amsterdam, Reinhold Book Corp., p. 307-316, illus., 1968.

9-215 **Clancy, Edward P.** Tides in the Earth, Chapter 9 *in* The tides—Pulse of the Earth: Garden City, N. Y., Doubleday and Co., p. 158-184, illus., 1968.

Clark, A. H. See *Sillitoe, R. H. 273-255*

Clark, D. L. See *Steuerwald, B. A. 268-393*

8-004 **Clark, George S.; Kulp, J. Laurence.** Isotopic age study of metamorphism and intrusion in western Connecticut and southeastern New York: Am. Jour. Sci., v. 266, no. 10, p. 865-894, illus., tables, 1968.

7-215 **Clark, Joseph C.** Correlation of the Santa Cruz Mountains Tertiary—Implications for San Andreas history, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 166-180, illus., 1968.

269-358 **Clark, Sydney P., Jr.** Remarks on thermal expansion: Jour. Geophys. Research, v. 74, no. 2, p. 731-732, 1969.

269-597 **Clarke, G. K. C.** Time-varying deconvolution filters: Geophysics, v. 33, no. 6, p. 936-944, illus., 1968.

267-245 **Clarke, Garry K. C.** Geophysical measurements on the Kaskawulsh and Hubbard Glaciers, Yukon Territory: Arctic Inst. North America Tech. Paper, no. 20, 36 p., illus., tables, 1967.

275-222 **Clarke, Garry K. C.** Optimum second-derivative and downward-continuation filters: Geophysics, v. 34, no. 3, p. 424-437, illus., table, 1969.

271-034 **Claus, George.** Studies on terrestrial contaminants of meteorites: New York Acad. Sci. Annals, v. 147, art. 9, p. 365-409, illus., tables, 1968.

Clawson, Gerald E. See *Engdahl, Eric R. 267-095*

Clay, C. S. See *Brakl, J. 264-414*

Clay, C. S. See *Hinich, M. J. 266-249*

Clay, C. S. See *Sanders, John E. 270-352*

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Clayton, R. N. See *Syers, J. K. 265-369*

265-370 **Clayton, R. N.; Skinner, H. C. W.; Berner, R. A.; Rubinson, M.** Isotopic composition of recent South Australian lagoonal carbonates: Geochim. et Cosmochim. Acta, v. 32, no. 9, p. 983-988, illus., tables, 1968.

268-355 **Clayton, R. N.; Muffler, L. J. P.; White, Donald E.** Oxygen isotope study of calcite and silicates of the River Ranch No. 1 well, Salton Sea geothermal field, California: Am. Jour. Sci., v. 266, no. 10, p. 968-979, illus., table, 1968.

Clayton, R. N. See *Rex, R. W. 269-376*

266-181 **Cleary, J. R.; Wright, C.; Muirhead, K. J.** The effects of local structure upon measurements of the travel time gradient at the Warramunga seismic array: Royal Astron. Soc. Geophys. Jour., v. 16, no. 1, p. 21-29, illus., table, 1968.

Cleary, J. R. See *Hales, A. L. 269-189*

Cleary, J. R. See *Doyle, H. A. 274-123*

264-158 **Cleary, John; Hales, Anton L.** *P* times from the nuclear explosion *Greeley*: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 305-309, illus., 1968.

275-100 **Cleary, John.** The S velocity at the core-mantle boundary, from observations o diffracted S: Seismol. Soc. America Bull., v. 59, no. 3, p. 1399-1405, illus., tables 1969.

270-201 **Clee, T. E.; Savage, J. C.; Neave, K. G.** Internal friction in ice near its melting point: Jour. Geophys. Research, v. 74, no. 4, p. 973-980, illus., 1969.

270-040 **Cleverly, W. H.** Further recoveries of two impact-fragmented Western Aus tralian meteorites, Haig and Mount Egerton: Royal Soc. Western Australia Jour., v 51, pt. 3, p. 76-88, illus., table, 1968.

268-023 **Cliff, R. A.** The age of tonalites in the south-east Tauernfenster, Austrian Alps— Rubidium/strontium whole rock ages on some associated leucogranites: Neues Jahrb Geologie u. Palaontologie Monatsh., no. 11, p. 655-663, illus., tables, 1968.

73-249 **Clifford, P. M.** Kink band development in the Lake St. Joseph area, northwestern Ontario, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 229-241, illus.; discussion, p. 241-242, 362, 1969.

67-017 **Clifford, T. N.** Radiometric dating and the pre-Silurian geology of Africa, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 229-416, illus., tables, 1968.

75-119 **Closmann, P. J.** On the prediction of cavity radius produced by an underground nuclear explosion: Jour. Geophys. Research, v. 74, no. 15, p. 3935-3939, illus., tables, 1969.

Closs, H. See *Behnke, C. 265-295*

65-318 **Closs, H.; Plaumann, S.** On the gravity of the Upper Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 92-93, illus., 1967.

73-296 **Closs, Hans; Plaumann, Siegfried.** Gedanken zur Tektonik der Kruste im Oberrheingraben aufgrund von Schweremessungen [Thoughts on the tectonics of the crust in the Upper Rhine graben on the basis of gravity measurements]: Geol. Jahrb., v. 85, p. 371-382, illus., 1968.

Closuit, Al W. See *Johnson, G. Leonard. 272-517*

55-088 **Cloud, Preston E., Jr.** Atmospheric and hydrospheric evolution on the primitive Earth: Science, v. 160, no. 3829, p. 729-736, illus., table, 1968.

55-092 **Cloud, Preston E., Jr.** The Moon—Time of appearance and nearest approach to Earth [reply to discussion by W. S. Olson, 1968, "Atmospheric and hydrospheric evolution on the primitive Earth"]: Science, v. 161, no. 3848, p. 1364, 1968.

Cloud, William K. See *vonHake, Carl A. 266-091*

Cloud, William K. See *vonHake, Carl A. 267-105*

Cloud, William K. See *vonHake, Carl A. 267-106*

8-124 **Clough, R. W.** Earthquake engineering research at the University of California, Berkeley, *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 49-54, 1968.

4-427 **Clowes, R.** Reflection seismology, Pt. B *in* Crustal structure in western Canada—Contract AF19(628)-2835, Final Rept. 1963-66 (AFCRL-66-519): Edmonton, Alberta, Univ. Alberta Dept. Physics, 126 p., paged separately, illus., 1966.

Clowes, R. M. See *Kanasewich, E. R. 268-339*

5-271 **Cluff, Lloyd S.** Urban development within the San Andreas fault system, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 55-66, illus., 1968.

Coates, D. F. See *Patching, T. H. 275-401*

-439 **Coats, Robert R.; Hay, Richard L.; Anderson, Charles A.** (editors). Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, 678 p., illus., tables, 1968.

Cocanower, R. D. See *Morris, Billy P. 272-542*

-323 **Cocks, A. C.; Price, A. T.** Sq currents in a three-dimensional ionosphere: Planetary and Space Sci., v. 17, no. 3, p. 471-482, illus., 1969.

Cocks, Alan C. See *Price, A. T. 274-327*

Cocks, George G. See *Sclar, Charles B. 273-085*

270-207 **Cogné, J.** Zones stables et zones mobiles au cours de l'orogenèse Hercynienne dans le Massif Armoricain, relations avec le champ de la pesanteur [Stable zones and mobile zones in the course of the Hercynian orogeny in the Massif Armoricain, relations with the gravity field], *in* Contribution de la carte gravimétrique à la géologie du Massif Armoricain: [France] Bur. Recherches Géol. et Minières Mém., no. 52, p. 14-23, illus., 1967.

265-090 Cohen, Alvin J.; Hapke, Bruce W. Radiation bleaching of thin lunar surface layer: Science, v. 161, no. 3847, p. 1237-1238, illus., 1968.

Cohen, Alvin J. See *Bunch, T. E. 273-087*

274-251 **Colbeck, S. C.; Evans, Roger J.** Experimental studies related to the mechanics of glacier flow: Trend Eng., v. 21, no. 2, p. 8-14, illus., 1969.

Colburn, D. S. See *Sonett, C. P. 265-082*

Colburn, D. S. See *Sonett, C. P. 266-067*

Colburn, D. S. See *Sonett, C. P. 266-424*

Colburn, D. S. See *Greenstadt, E. W. 267-385*

274-375 **Cole, J. W.; Hunt, T. M.** Basalt dikes in the Tarawera Volcanic Complex, New Zealand: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1203-1206, illus., table, 1968.

268-384 **Cole, K. D.; Thomas, J. A.** Maps of the difference in geomagnetic field at conjugate areas: Planetary and Space Sci., v. 16, no. 11, p. 1357-1363, illus., tables, 1968.

264-259 **Coleman, P. J.; Day, A. A.** Petroleum—Possibilities and marked gravity anomalies in north central Guadacanal: British Solomon Islands Geological Records 1959-62, p. 112-119, illus., n. d.; reprinted as British Solomon Islands Geological Survey Report, no. 44, n. d.

Coleman, P. J. See *Jones, D. E. 273-345*

Coleman, P. J., Jr. See *Cummings, W. D. 265-381*

Coleman, P. J., Jr. See *Cummings, W. D. 267-378*

Coleman, P. J., Jr. See *Cummings, W. D. 269-388*

273-333 **Coleman, Paul J., Jr.; Smith, Edward J.; Davis, Leverett, Jr.; Jones, Douglas E.** The radial dependence of the interplanetary magnetic field—1.0-1.5 AU: Jour. Geophys. Research, v. 74, no. 11, p. 2826-2850, illus., tables, 1969.

Coleman, Robert G. See *Taylor, Hugh P., Jr. 267-345*

Collard, Harold R. See *Intriligator, Devrie S. 272-316*

265-335 **Collette, B. J.; Lagaay, R. A.; Lennep, A. P. van; Shouten, J. A.; Schuiling, R. D.** Some heat-flow measurements in the North Atlantic Ocean: Koninkl. Nederlandse Akad. Wetensch. Proc., ser. B, v. 71, no. 3, p. 203-208, illus., table, 1968.

265-359 **Collette, B. J.** The subsidence of the North Sea area—A summary, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1123-1124, illus., 1968.

266-296 **Collette, B. J.** On the subsidence of the North Sea area, *in* Geology of shelf seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver and Boyd, p. 15n30, illus., 1968.

264-237 **Collins, I. F.** On the use of the equilibrium equations and flow law in relating the surface and bed topography of glaciers and ice sheets [with German and French abs.]: Jour. Glaciology, v. 7, no. 50, p. 199-204, illus., 1968.

Collins, R. J. See *Gault, D. E. 268-084*

Collins, R. J. See *Gault, D. E. 275-077*

65-432 **Collinson, D. W.** An estimate of the haematite content of sediments by magnetic analysis: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 417-421, illus., tables, 1968.

69-437 **Collinson, D. W.** Ferrous and ferric iron in red sediments and their magnetic properties: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 531-542, illus., tables, 1968.

66-410 **Colombo, U.; Gazzarrini, F.; Gonfiantini, R.; Kneuper, G.; Teichmüller, M.; Teichmüller,** R. Das Verhältnis der stabilen Kohlenstoff-Isotope von Steinkohlen und kohlenburtigem Methan in Nordwestdeutschland [The ratio of the stable carbon isotopes of coals and methane originating from coals in Northwest Germany (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 5, p. 257-265, illis., 1968.

70-033 **Comerford, Matthias F.; McCorkell, Robert H.; Tishler, Samuel W.** A new octahedrite from South Africa: Meteoritics, v. 4, no. 1, p. 7-21, illus., tables, 1968.

74-121 **Comninakis, P.; Drakopoulos, J.; Moumoulidis, G.; Papazachos, B.** Foreshock and aftershock sequences of the Cremasta earthquake and their relation to the waterloading of the Cremasta artificial lake: Annali Geofisica, v. 21, no. 1, p. 39-71, illus., table, 1968.

Compston, W. See *Bofinger, V. M. 264-018*

4-034 **Compston, W.; Nesbitt, R. W.** Isotopic age of the Tollu Volcanics, W. A.: Geol. Soc. Australia Jour., v. 14, pt. 2, p. 235-238, illus., table, 1967.

3-011 **Compston, W.; Arriens, P. A.** The Precambrian geochronology of Australia, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 561-583, illus., 1968.

5-273 **Compston, W.; Lovering, J. F.** The strontium isotope geochemistry of granulitic and eclogitic inclusions from the basic pipes at Delegate, Eastern Australia: Geochim. et Cosmochim. Acta, v. 33, no. 6, p. 691-699, illus., tables, 1969.

4-277 **Condie, Kent C.** Possible role of water in the Earth's thermal history: Jour. Geophys. Research, v. 73, no. 16, p. 5466-5468, illus., 1968.

2-010 **Condie, Kent C.; Leech, A. P.; Baadsgaard, H.** Potassium-argon ages of Precambrian mafic dikes in Wyoming: Geol. Soc. America Bull., v. 80, no. 5, p. 899-905, illus., table, 1969.

4-005 **Condie, Kent C.** Geologic evolution of the Precambrian rocks in northern Utah and adjacent areas, *in* Guidebook of northern Utah: Utah Geol. and Mineralog. Survey Bull. 82, p. 71-95, illus., tables, 1969.

Condon, J. J. See *Gold, T. 264-075*

Condon, William H. See *Hoare, Joseph M. 270-441*

268-072 **Conel, J. E.** What the Rangers revealed about lunar geology: Astronautics and Aeronautics, v. 7, no. 1, p. 64-68, illus., 1969.

269-089 **Conel, J. E.; Holstrom, G. B.** Lunar mascons—A near-surface interpretation: Science, v. 162, no. 3860, p. 1403-1405, illus., 1968.

271-041 **Conel, James E.** Infrared emissivities of silicates—Experimental results and a cloudy atmosphere model of spectral emission from condensed particulate mediums: Jour. Geophys. Research, v. 74, no. 6, p. 1614-1634, illus., tables, 1969.

Coney, Peter J. See *Elston, Wolfgang E. 267-252*

Connell, J. G. See *Tixier, M. P. 270-487*

Conner, M. See *Hade, G. 267-135*

270-497 **Connolly, E. T.** Standardization of large volumes of log data for computer analysis, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. [L]1-[L]19, illus., tables, 1968.

273-491 **Conolly, John R.** Submarine canyons of the continental margin, East Bass Strait (Australia): Marine Geology, v. 6, no. 6, p. 449-461, illus., 1968.

265-364 **Constantinescu, Liviu; Enescu, D.; Ianăş, M.** Intégration des informations séismologiques et gravimétriques pour l'étude de la structure de l'écorce terrestre en Roumanie [Integration of seismic and gravimetric information for study of the structure of the Earth's crust in Rumania]: Rev. Roumaine Géologie, Géophysique, Géographie, Sér. Géophysique, v. 12, no. 1, p. 3-15, 1968.

273-312 **Constantinescu, V.; Croitoru, M.** Cercetări hidrogeologice pentru ape termominerale în zona Hîrşova-Vadu Oii [Hydrogeologic research for thermomineral water in the Hirsova-Vadu Oii zone (with English and French abs.)]: Romania Com. Geol. Dări Seamă Şed., v. 53 (1965-66), no. 3, p. 293-311, tables, 1968.

267-164 **Contini, G. Finzi; Norinelli, A.** Studio per polarizzazione indotta di campioni di bauxite pisolitica—Primi risultati [Study of the induced polarization of samples of pisolitic bauxite—First results (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 204-218, illus., tables, 1968.

268-207 **Cook, A. H.** The polar flattening and gravity formula in the Geodetic Reference System 1967: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 431-433, 1968.

269-138 **Cook, David W.** How we mapped the Moon: Natl. Geog. Mag., v. 135, no. 2, p. 240-245, illus., 1969.

Cook, G. E. See *King-Hele, D. G. 265-315*

Cook, G. E. See *King-Hele, D. G. 273-224*

Cook, N. G. W. See *Wiebolds, G. A. 268-582*

272-332 **Coon, J. H.** Solar wind observations, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York and Amsterdam Reinhold Book Corp., p. 359-371, illus., 1968.

272-170 **Cooney, P. M.; Paul, D. R.; Bishop, J. R.** Induced polarization survey of Valla Mine, Urunga, N. S. W.: New South Wales Geol. Survey Rept., no. 57, p. 12-15, illus., 1967.

264-215 **Cooper, Byron N.** Profile of the folded Appalachians of western Virginia, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt Geology Dept. Colloquium Ser. 1), p. 27-64, illus., 1968.

Coppens, R. See *Roubault, M. 273-035*

268-236 **Corbel, Jean.** Soulèvement isostatique et englacement ancien (Spitzberg et Mer de Barentz) [Isostatic uplift and ancient glaciation (Spitsbergen and Barents Sea)], *in* Ergebnisse der Stauferland-Expedition 1959/60, V. 3 – Vorträge des Fridtjof-Nansen-Gedächtnis-Symposions über Spitzbergen, Würzburg, Germany 1961: Wiesbaden, Germany, Franz Steiner Verlag GMBH, p. 59-67, illus., tables, 1965.

265-270 **Corbett, J. D.** Geophysical exploration continues its rapid pace: Mining Eng., v. 20, no. 2, p. 68-72, illus., 1968.

273-014 **Cordani, U. G.; Melcher, G. C.; Almeida, F. F. M. de.** Outline of the Precambrian geochronology of South America, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 629-632, illus., 1968.

265-309 **Cordell, Lindrith; Henderson, Roland G.** Iterative three-dimensional solution of gravity anomaly data using a digital computer: Geophysics, v. 33, no. 4, p. 596-601, illus., 1968.

265-368 **Corless, James T.** Observations on the isotopic geochemistry of calcium: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 475-478, illus., table, 1968.

268-548 **Cornea, I.; Enescu, D.** Sur la nature de certaines ondes rencontrées au cours des travaux de prospection en Roumanie et leur interprétation géologique [On the nature of certain waves encountered in the course of prospecting work in Rumania and their geologic interpretation], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 143-157, illus., 1968.

Cornea, I. See *Talos, D. 271-521*

267-101 **Cornell, C. Allin.** Engineering seismic risk analysis: Seismol. Soc. America Bull., v. 58, no. 5, p. 1583-1606, illus., tables, 1968.

Coroniti, F. V. See *Parks, George K. 265-408*

Corpel, J. See *Jaeger, Jean-Louis. 270-215*

Corry, C. E. See *Sclater, J. G. 270-226*

Cortesi, C. See *Alessio, M. 265-018*

271-370 **Costa-Foru, Alex.; Rădulescu, S.; Roșca, V.** Contribution paléomagnetique à la séparation de quelques eruptions Néogènes en Roumanie [Paleomagnetic contribution to the separation of some Neogene eruptions in Rumania]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géophysique, v. 12, no. 2, p. 105-114, illus., tables, 1968.

274-274 **Costain, John K.; Wright, Phillip M.** Heat flow and precision temperature measurements in boreholes, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. J1-J21, illus., tables, 1969.

Couch, R. W. See *Dehlinger, P. 265-355*

266-340 **Cowan, Margaret; Hatherton, T.** Gravity surveys in Wellington and Hutt Valley: New Zealand Jour. Geology and Geophysics, v. 11, no. 1, p. 3-15, illus., 1968.

266-266 **Cox, Allan.** Polar wandering, continental drift, and the onset of Quaternary glaciation, *in* Causes of climatic change—INQUA-NCAR Symposium, Boulder, Colo., 1965 (INQUA, 7th Cong., 1965, Proc., V. 5): Meteorol. Mons., v. 8, no. 30, p. 112-125, illus., tables, 1968.

Cox, Allan. See *Doell, Richard R. 266-443*

266-446 **Cox, Allan; Doell, R. R.** Paleomagnetism and Quaternary correlation, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 253-265, illus., 1968.

269-421 **Cox, Allan.** Geomagnetic reversals: Science, v. 163, no. 3864, p. 237-245, illus., tables, 1969.

269-427 **Cox, Allan; Doell, R. R.; Dalrymple, G. B.** Time scale for geomagnetic reversals, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 101-108, illus., tables, 1968.

Cox, Allan. See *Hoare, Joseph M. 270-441*

272-360 **Cox, Allan; Doell, Richard R.; Dalrymple, G. Brent.** Radiometric time-scale for geomagnetic reversals: Geol. Soc. London Quart. Jour., v. 124, pt. 1, p. 53-66, illus., tables, 1968.

Craig, Harmon. See *White, Donald E. 267-352*

267-353 **Craig, Harmon.** The isotopic geochemistry of water and carbon in geothermal areas, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 17-53, illus. [1967].

270-227 **Craig, Harmon.** Discussion [of paper by H. C. Helgeson, 1968]—Source fluids for the Salton Sea geothermal system: Am. Jour. Sci., v. 267, no. 2, p. 249-255, illus., table, 1969.

Craighead, Frank C., Sr. See *Scholl, David Q. 269-005*

267-226 **Cramer, Fritz H.** Silurian palynologic microfossils and paleolatitudes: Neues Jahrb. Geologie u. Paläontologie Monatsh., no. 10, p. 591-597, illus., 1968.

Crampin, Stuart. See *Ambraseys, N. N. 267-113*

275-012 **Crawford, A. R.** India, Ceylon and Pakistan—New age data and comparisons with Australia: Nature, v. 223, no. 5204, p. 380-384, illus., table, 1969.

264-394 **Creer, K. M.** Devonian geography deduced by the palaeomagnetic method, *in* Internat. Symposium on the Devonian System, Calgary, Alberta, 1967, V. 2 (D. H. Oswald, editor): Calgary, Alberta, Alberta Soc. Petroleum Geologists, p. 1371-1377, illus., 1967.

264-395 **Creer, K. M.** A synthesis of world-wide palaeomagnetic data, *in* Mantles of the Earth and terrestrial planets (S. K. Runcorn, editor): London and New York, Interscience Publishers, p. 351-382, illus., tables, 1967.

264-396 **Creer, K. M.** Palaeozoic palaeomagnetism: Nature, v. 219, no. 5151, p. 246-250, illus., table, 1968.

268-401 **Creer, K. M.** Paleolatitudes of the continents in the Devonian as revealed by the natural remanent magnetization of rocks, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 269-284, 301, illus., tables, 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 170-183, 1968.

271-365 **Creer, K. M.** Palaeomagnetic measurements on rocks from the Passa Dois and São Bento Series from southern Brazil, *in* Problems in Brazilian Gondwana geology (J. J. Bigarella, R. D. Becker, I. D. Pinto, editors)—Brazilian contribution to Internat. Symposium on Gondwana Stratigraphy and Palaeontology, 1st, Argentina, 1967: Curitiba, Brazil, Univ. Federal Paraná, p. 303-317, illus., tables, 1967.

267-250 **Cremer, E. A., 3d.** Gravimetric survey, *in* Geology and ground-water resources of the Deer Lodge Valley, Montana: U.S. Geol. Survey Water-Supply Paper 1862, p. 27-29, 1968.

272-528 **Crippen, R. G.; Wright, A. C.** Procedures and techniques employed in logging and evaluating high angle well bores on a large scale drilling and development program, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. C1-C25, illus., 1968.

268-378 **Criswell, David R.** Pc 1 micropulsation activity and magnetospheric amplification of 0.2- to 5.0-hz hydromagnetic waves: Jour. Geophys. Research, v. 74, no. 1, p. 205-224, illus., tables, 1969.

272-546 **Crocker, Hugh; Strecker, Ian.** Formation evaluation in Australia, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. V1-V39, illus., tables, 1968.

267-311 **Crockett, Richard N.; Mason, Robert.** Foci of mantle disturbance in southern Africa and their economic significance: Econ. Geology, v. 63, no. 12, p. 532-540, illus., 1968.

Croitoru, M. See *Constantinescu, V. 273-312*

275-434 **Cronoble, James M.** Geothermal gradients and their application to petroleum geology: Mtn. Geologist, v. 6, no. 1, p. 27-39, illus., table, 1969.

Crook, G. M. See *Fredricks, R. W. 269-396*

269-008 **Crosby, Percy.** Tectonic, plutonic, and metamorphic history of the central Kootenay arc, British Columbia, Canada: Geol. Soc. America Spec. Paper 99, 94 p., illus., tables, 1968.

270-050 **Cross, C. A.** The distribution of lunar craters: Royal Astron. Soc. Monthly Notices, v. 134, no. 3, p. 245-252, illus., tables, 1966.

270-053 **Cross, C. A.; Fisher, D. L.** The computer simulation of lunar craters: Royal Astron. Soc. Monthly Notices, v. 139, no. 2, p. 261-272, illus., table, 1968.

Crosson, R. S. See *Christensen, N. I. 273-320*

72-133 **Crosson, Robert S.; Christensen, Nikolas I.** Transverse isotropy of the upper mantle in the vicinity of Pacific fracture zones: Seismol. Soc. America Bull., v. 59, no. 1, p. 59-72, illus., tables, 1969.

64-220 **Crowell, John C.** The California Coast Ranges, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 133-156, illus., table, 1968.

66-288 **Crowell, John C.** Movement histories of faults in the Transverse Ranges and speculations on the tectonic history of California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 323-338, illus.; discussion, p. 338-341, 1968.

59-610 **Crowley, Francis A.; Ossing, Henry A.** Portable seismic array system: U.S. Air Force Cambridge Research Labs. Instrumentation Paper 145 (AFCRL-68-0398), 13 p., illus., 1968.

59-044 **Crozaz, Ghislaine.** Datation des glaciers par le plomb-210 [Dating of glaciers by lead-210 (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 385-393, illus., 1967.

269-152 **Cruikshank, Dale P.** Infrared spectral luminance studies of the Moon and Mars, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 119-126, illus., 1968.

266-559 **Cucuzza Silvestri, Salvatore.** Temperatura e viscosita delle lave dell'Etna [Temperature and viscosity of lava of Etna (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 16th Ann., Naples, 1967, Atti: Rome, Consiglio Nazionale Ricerche, p. 261-268, illus., tables, 1968.

267-611 **Cullen, David J.** The submarine geology of Foveaux Strait: New Zealand Dept. Sci. and Indus. Research Bull. 184 (new Zealand Oceanog. Inst. Mem., no. 33), 67 p., illus., tables, 1967.

268-217 **Cullen, David J.** Movement of sialic blocks oblique to the direction of sea-floor spreading: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 123-126, illus., 1968.

270-192 **Cullen, David J.** The Antipodes fracture zone, a major structure of the southwest Pacific: New Zealand Jour. Marine and Freshwater Research, v. 1, no. 1, p. 16-25, illus., 1967.

271-176 **Cullen, David J.** Strike-slip displacement of mid-ocean rises and the concept of mid-ocean rise migration: Jour. Geophys. Research, v. 74, no. 6, p. 1409-1412, 1969.

Cullingford, R. A. See *Smith, D. E. 273-257*

273-354 **Cullington, A. L.** The magnetic secular variation at Scott Base and Hallett Station: New Zealand Jour. Geology and Geophysics, v. 11, no. 4, p. 982-986, tables, 1968.

273-355 **Cullington, A. L.** The diurnal variation in magnetic activity at Scott Base and Hallett Station: New Zealand Jour. Geology and Geophysics, v. 11, no. 4, p. 987-1000, illus., table, 1968.

Cumming, G. L. See *Welke, H. 264-307*

Cumming, G. L. See *Shafiqullah, M. 267-029*

Cumming, G. L. See *Folinsbee, R. E. 268-213*

Cumming, G. L. See *Robertson, D. K. 269-013*

Cumming, G. L. See *Shafiqullah, M. 269-071*

Cumming, G. L. See *Green, D. C. 273-027*

Cumming, G. L. See *Folinsbee, R. E. 274-037*

274-426 **Cumming, G. L.; Kanasewich, E. R.** Refraction seismology, Pt. A *in* Crustal structure in western Canada—Contract AF19(628)-2835, Final Rept. 1963-66 (AFCRL-66-519): Edmonton, Alberta, Univ. Dept. Physics, 48 p., paged separately, illus., tables, 1966.

Cumming, L. M. See *Howie, R. D. 264-480*

273-066 **Cummings, David.** Shock deformation of biotite around a nuclear explosion, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 211-217, illus., 1968.

266-278 **Cummings, Jon C.** The Santa Clara Formation and possible post-Pliocene slip on the San Andreas fault in central California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 191-206, illus., tables; discussion, p. 206-207, 1968.

265-381 **Cummings, W. D.; Coleman, P. J., Jr.** Magnetic fields in the magnetopause and vicinity at synchronous altitude: Jour. Geophys. Research, v. 73, no. 17, p. 5699-5718, illus., tables, 1968.

267-378 **Cummings, W. D.; Barfield, J. N.; Coleman, P. J., Jr.** Magnetospheric substorms observed at the synchronous orbit: Jour. Geophys. Research, v. 73, no. 21, p. 6687-6698, illus., 1968.

269-388 **Cummings, W. D.; O'Sullivan, R. J.; Coleman, P. J., Jr.** Standing Alfvén waves in the magnetosphere: Jour. Geophys. Research, v. 74, no. 3, p. 778-793, illus., tables, 1969.

Cummings, W. D. See *Schubert, Gerald. 269-391*

65-595 **Cuong, Nguyen Ba; Lambert, Gérard; Polian, Georges; Jacquin, Jean-Pierre.** Comparaison des distributions verticales du radon 222 de 0 a 4,500 m au-dessus de l'océan Atlantique, du continent Antarctique et de la région parisienne [Comparison of the vertical distributions of radon-222 from 0 to 4,500 m above the Atlantic Ocean, the Antarctic continent, and the Paris region]: Acad. Sci. Comptes Rendus, ser. B, v. 265, no. 19, p. 1065-1068, illus., 1967.

Curray, J. R. See *Stride, A. H. 270-355*

Curray, J. R. See *Winterer, E. L. 271-507*

Curray, Joseph R. See *Normark, William R. 267-575*

Currie, D. G. See *Bender, P. L. 264-201*

Currie, D. G. See *Alley, C. O. 268-086*

67-618 **Currie, K. L.** Mistastin Lake, Labrador—A new Canadian crater: Nature, v. 220, no. 5169, p. 776-777, illus., 1968.

73-079 **Currie, K. L.** A note on shock metamorphism in the Carswell circular structure, Saskatchewan, Canada, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 379-381, illus., 1968.

Currie, R. L. See *Fisher, D. E. 272-059*

70-440 **Curtis, G. H.** The stratigraphy of the ejecta from the 1912 eruption of Mount Katmai and Novarupta, Alaska, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, p. 153-210, illus., 1968.

Czyszek, W. See *Kalinowska, Zofia. 265-421*

3-090 **Dachille, Frank; Gigl, Paul; Simons, P. Y.** Experimental and analytical studies of crystalline damage useful for the recognition of impact structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 555-569, illus., tables, 1968.

4-049 **Daehler, Mark; Mack, J. E.; Stoner, J. O., Jr.** Measurements of the H_{beta} profile in the zodiacal light spectrum: Planetary and Space Sci., v. 16, no. 6, p. 795-801, illus., 1968.

Dagley, P. See *Ade-Hall, J. M. 269-434*

Dagley, P. See *Ade-Hall, J. M. 269-435*

Dagley, P. See *Ade-Hall, J. M. 269-436*

269-198 **Dahlen, F. A.** The normal modes of a rotating, elliptical Earth: Royal Astron. Soc. Geophys. Jour., v. 16, no. 4, p. 329-367, illus., tables, 1968.

Dakhkil'gov, T. D. See *Sharovarin, V. D. 266-574*

270-513 **Dakhnov, V. N.** Opredeleniye koeffitsiyentov poristosti, neftegazonosti i pronitsayemosti glinistykh granularnykh kollektorov pri podschetakh zapasov nefti i gaza [Determination of the coefficients of porosity, oil- and gas-bearing capability, and permeability of shaly granular reservoirs in estimations of oil and gas reserves]: Geologiya Nefti i Gaza, no. 11, p. 56-59, illus., 1968.

d'Albissin, Micheline. See *Daly, Lucien. 266-465*

Dalmatskaya, I. I. See *Vorob'yev, A. A. 270-163*

266-005 **Dalrymple, G. B.** Potassium-argon dating in Pleistocene correlation, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 175-194, illus., tables, 1968.

Dalrymple, G. B. See *Cox, Allan. 269-427*

265-001 **Dalrymple, G. Brent; Moore, James G.** Argon-40—Excess in submarine pillow basalts from Kilauea Volcano, Hawaii: Science, v. 161, no. 3846, p. 1132-1135, illus., table, 1968.

Dalrymple, G. Brent. See *Mussett, Alan E. 265-037*

Dalrymple, G. Brent. See *Hoare, Joseph M. 270-441*

Dalrymple, G. Brent. See *Doell, Richard R. 271-364*

Dalrymple, G. Brent. See *Cox, Allan. 272-360*

266-503 **Dalu, G.** Esame di un metodo per misure di radioattività naturale [Investigation of a method of measurement of natural radioactivity (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 16th Ann., Naples, 1967, Atti: Rome, Consiglio Nazionale Ricerche, p. 211-229, illus., 1968.

267-441 **Daly, L.** L'anisotropie magnetique des roches et sa mesure par un inductometre a translation [The magnetic anisotropy of rocks and its measurement by a translation inductometer [with English abs.]: Annales Geophysique, v. 23, no. 4, p. 619-627, illus., 1967.

266-465 **Daly, Lucien; d'Albissin, Micheline.** Corrélation entre les anisotropies de susceptibilité magnétique et de dilatation thermique des roches: application en structurologie [Correlation between anisotropies of magnetic susceptibility and thermal expansion of rocks; applications in structural geology]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 5, p. 473-476, tables, 1968.

272-362 **Daly, Lucien; Formont, René.** Détermination des faibles anisotropies magnétiques des roches et autres matériaux par la méthode du pendule de torsion [Determination of weak magnetic anisotropies of rocks and other materials by the torsion pendulum method]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 1, p. 110-112, illus., 1969.

Dalyan, G. P. See *Atsagortsyan, Z. A. 268-602*

Dambara, Takeshi. See *Tsubokawa, Ietsune. 264-118*

268-261 **Dambara, Takeshi.** Correlation of vertical movement and gravity anomalies in two zones of the Japanese Islands, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 307-311, illus., 1968.

269-335 **Damnjanović, Konstantin.** Application of some relations for the conversion of the direction of polarization: [Yugoslavia] Zavod Geol. Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C., nos. 4-5, 1963-64, English edition, p. 185-194, illus., 1966.

269-466 **Damnjanović, Konstantin.** Conversion of the direction of polarization and some problems of applied geophysics which involve surface integration: [Yugoslavia] Zavod Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C, nos. 4-5, 1963-64, English edition, p. 39-122, illus., 1966.

269-631 **Damnjanović, Konstantin.** Contribution to the interpretation of seismic refraction and reflection data: [Yugoslavia] Zavod Geol. i Geofiz. Istraživania Vesnik Primen. Geofizika, ser. C, nos. 4-5, 1963-64, English edition, p. 29-38, illus., 1966.

266-006 **Damon, P. E.** Radioactive dating of Quaternary tephra [with German abs.], *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 195-206, illus., table, 1968.

269-049 **Damon, P. E.; Laughlin, A. W.; Percious, J. K.** Problem of excess argon-40 in volcanic rocks, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 463-481, illus., tables, 1967.

Damon, P. E. See *Grey, D. C. 272-009*

267-012 **Damon, Paul E.** Potassium-argon dating of igneous and metamorphic rocks with applications to the Basin ranges of Arizona and Sonora, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 1-71, illus., tables, 1968.

Damon, Paul E. See *Maugher, Richard L. 264-013*

264-022 **Damon, Paul E.** Application of the potassium-argon method to the dating of igneous and metamorphic rock within the Basin Ranges of the southwest, *in* Southern Arizona Guidebook 3—Geol. Soc. America Cordilleran Sec., 64th Ann. Mtg., Tucson, 1968: Tucson, Ariz., Arizona Geol. Soc., p. 7-20, illus., tables, 1968.

266-407 **Damon, Paul E.** Radiocarbon and climate—A comment on a paper by H. Suess, *in* Causes of climatic change—INQUA-NCAR Symposium, Boulder, Colo., 1965 (INQUA, 7th Cong., 1965, Proc., V. 5): Meteorol. Mons., v. 8, no. 30, p. 151-154, illus., 1968.

267-030 **Damon, Paul E.; Mauger, Richard L.; Bikerman, Michael.** K-Ar dating of Laramide plutonic and volcanic rocks within the Basin and Range province of Arizona and Sonora, *in* Cretaceous-Tertiary boundary including volcanic activity—Internat. Geol. Cong., 22d, India, 1964, Rept., Pt. 3, Proc. Sec. 3: Calcutta, India, Internat. Geol. Cong. Organising Comm., p. 45-55, illus., tables, 1964.

Damon, Paul E. See *Livingston, Donald E. 273-031*

271-266 **Dampney, C. N. G.** The equivalent source technique: Geophysics, v. 34, no. 1, p. 39-53, illus., table, 1969.

Daneliya, K. K. See *Tsitsishvili, D. A. 266-235*

64-289 **Daneš, Z. F.** Isostatic processes in media of variable viscosity—[Pt.] 1, Cartesian geometry: Icarus, v. 9, no. 1, p. 1-7, 1968.

264-290 **Daneš, Z. F.** Isostatic processes in media of variable viscosity—[Pt.] 2, Spherical geometry: Icarus, v. 9, no. 1, p. 8-11, 1968.

264-291 **Daneš, Z. F.** On slow thermal convection in a layer of fluid of variable viscosity: Icarus, v. 9, no. 1, p. 12-15, 1968.

273-101 **Daneš, Z. F.** Convection in the interiors of planets: Icarus, v. 10, no. 1, p. 53-56, 1969.

Danilin, A. I. See *Ferronskiy, V. I. 265-599*

Danilovich, L. G. See *Bagdasaryan, G. P. 267-037*

Danov, A. V. See *Gavrilov, Ye. Ya. 272-291*

270-202 **Dansgaard, W.; Johnsen, S. J.** Comment on paper by J. Weertman, "Comparison between measured and theoretical temperature profiles of the Camp Century, Greenland, borehole" [1968]: Jour. Geophys. Research, v. 74, no. 4, p. 1109-1110, illus., 1969.

Dansgaard, W. See *Ambach, W. 271-263*

275-213 **Dansgaard, W.; Johnsen, S. J.** A flow model and a time scale for the ice core from Camp Century, Greenland [with French and German abs.]: Jour. Glaciology, v. 8, no. 53, p. 215-223, illus., 1969.

Darakhvelidze, L. K. See *Tskhakaya, A. D. 265-166*

271-498 **Darbyshire, J.; Okeke, E. O.** A study of primary and secondary microseisms recorded in Anglesey: Royal Astron. Soc. Geophys. Jour., v. 17, no. 1, p. 63-92, illus., tables, 1969.

270-341 **Darnley, A. G.; Fleet, M.** Evaluation of airborne gamma-ray spectrometry in the Bancroft and Elliot Lake areas of Ontario, Canada, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 833-853, illus., 1968.

269-374 **Dasch, E. Julius.** Strontium isotope disequilibrium in a porphyritic alkali basalt and its bearing on magmatic processes: Jour. Geophys. Research, v. 74, no. 2, p. 560-565, tables, 1969.

DasGupta, A. See *Basu, S. 267-377*

268-340 **Dash, B. P.; Bosshard, E.** Crustal studies around the Canary Islands, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 249-260, illus., tables, 1968.

269-340 **Dashkevich, N. N.; Musatov, D. I.; Feygin, Ye. B.; Sherman, M. L.; Yaskevich, V. I.** Glubinnoye stroyeniye zapadnoy chasti Sibirskoye platformy i svyaz' s nim trappovogo magmatizm [Deep structure of the western part of the Siberian platform and relationship of the trap magmatism to it (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 113-116, illus., 1968.

Dashkov, G. G. See *Vinnik, L. N. 272-273*

270-133 **Dassler, Hans-Jurgen; Naake, Lothar.** Auswertung magnetotellurischer Registrierungen mit Rechenmaschinen [Interpretation of magnetotelluric records with computers]: Freiberger Forschungshefte, C 233, p. 29-42, illus., 1968.

264-377 **Das'yanenko, L. G.; Roze, Ye. N.** Method of determining the secular variation of the magnetic field in the oceans: Geomagnetism and Aeronomy, v. 8, no. 1, p. 108-112, illus., tables, 1968.

Datta, S. See *Gupta Sarma, D. 264-425*

268-153 **Datta, S.** Absorption of dilatational waves in rocks: Geoexploration, v. 6, no. 3, p. 127-139, illus., 1968.

266-183 **Datta, Satyabrata; Simha, K. R. Madhwa.** Elastic wave velocities in rocks: Pure and Appl. Geophysics, v. 70, no. 2, p. 5-11, illus., tables, 1968.

274-496 **Daushvili, D. S.** Otsenka kollektorskikh svoystv karbonatnykh porod zapadnogruzinskikh nefterazvedochnykh ploshchadey po dannym promyslovo-geofizicheskikh issledovaniy razrezov skvazhin [Assessment of the reservoir properties of the carbonate rocks of the west Georgian oil exploration areas on the basis of data of geophysical logging investigations of well sections]: Akad. Nauk Gruzin. SSR Soobshch., v. 51, no. 3, p. 573-578, illus., 1968.

270-059 **Dauvillier, Alexandre.** Sur l'atmosphère primitive du Globe et les atmosphères de Vénus et de Mars [The primitive atmosphere of the Earth and the atmospheres of Venus and Mars]: Acad. Sci. Comptes Rendus, Series D., v. 267, no. 7, p. 697-700, 1968.

72-054 **Dauvillier, Alexandre.** Re the chronology of meteorites [translated from Soc. Royale Sci. Liege, v. 35, nos. 11-12, p. 700-703, 1966]: Canada Defense Board Directorate Sci. Inf. Services, 4 p., illus., 1967.

74-067 **Dauvillier, M. A.** Les "mers" de Mars sont-elles des mers lunaires, [Are the "seas" of Mars lunar seas?]: Ciel et Terre, v. 83, nos. 11-12, p. 384-385, 1967.

Davenport, A. G. See *Milne, W. G. 274-090*

David, B. See *Tobailem, J. 269-099*

64-589 **Davidenko, F. K.; Korzhuk, V. I.; Lantsman, A. Kh.; Stetsyakh, M. S.; Chernysheva, A. A.** Izucheniye svyazi fiziko-elektricheskikh parametrov s kollektorskimi svoystvami porod i otsenka kollektorov nefti i gaza Dneprovsko-Donetskoy vpadiny i Predkarpatskogo progiba po dannym promyslovoy geofiziki [Study of the relationship of the physical-electrical parameters to the reservoir properties of the rocks and appraisal of the oil and gas reservoirs in the Dnieper-Donets basin and Ciscarpathian depression according to geophysical logging data]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 10, p. 243-252, tables, 1965.

75-452 **Davidenko, F. K.; Kapkanshchikova, I. A.; Stetsyak, M. S.** Ob otsenke kharaktera nasyshchennosti kollektorov paleogena vnutrenney zony Predkarpatskogo progiba [On the assessment of the character of the saturation of the Paleogene reservoirs of the inner zone of the Carpathian foreland depression (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 68-72, illus., table, 1969.

Davidovich, N. V. See *Chizov, O. P. 264-241*

Davids, L. See *Muhleman, D. O. 268-082*

Davids, L. See *Muhleman, D. O. 275-075*

57-393 **Davies, Christine M.** The boundary layer between a cold plasma and a confined magnetic field when the plasma is not normally incident on the boundary: Planetary and Space Sci., v. 16, no. 10, p. 1249-1257, tables, 1968.

72-317 **Davies, Christine M.** The structure of the magnetopause: Planetary and Space Sci., v. 17, no. 3, p. 333-338, illus., tables, 1969.

8-222 **Davies, D.** When did the Seychelles leave India,: Nature, v. 220, no. 5173, p. 1225-1226, 1968.

71-548 **Davies, D.** Geophysical exploration in the deep oceans, *in* The technology of the sea and the sea-bed—Conf., Harwell, England, 1967, Proc., V. 3: London, United

Kingdom Atomic Energy Authority Research Group (H. M. Stationery Office), p. 628-639, tables, 1967.

273-125 **Davies, D.** Geomagnetic variations and seismic absorption in Scotland: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 317-320, table, 1969.

Davies, D. See *Tramontini, C. 274-430*

266-505 **Davies, E. B.; Mercado, E. J.** Multichannel deconvolution filtering of field recorded seismic data: Geophysics, v. 33, no. 5, p. 711-722, illus., 1968.

Davies, John. See *Gedney, Larry. 275-102*

267-100 **Davies, John B.; Smith, Stewart W.** Source parameters of earthquakes, and discrimination between earthquakes and nuclear explosions: Seismol. Soc. America Bull., v. 58, no. 5, p. 1503-1517, illus., tables, 1968.

Davies, K. G. See *Royea, M. J. 275-400*

266-084 **Davies, R. D.; Gardner, F. F.** Linear polarization of the Moon at 6, 11, and 21 cm wavelengths: Australian Jour. Physics, v. 19, no. 6, p. 823-836, illus., table, 1966.

274-371 **Davino, André.** Aplicação do metodo magnetométrico em jazidas de manganes da Bahia [Application of the magnetic method to the manganese deposits of Bahia (with French abs.)]: Engenharia, Mineração, Metalurgia, v. 47, no. 278, p. 81-82, illus., 1968.

Davis, E. Mott. See *Valastro, S., Jr. 265-021*

Davis, G. A. See *Burchfiel, B. C. 269-313*

264-317 **Davis, G. H.; Gattinger, T.; Payne, B. R.; Dincer, T.; Florkowski, T.** Jahreszeitliche Schwankungen des Tritiumgehaltes von Grundwassern des Wiener Beckens [Annual variations of the tritium content of ground waters of the Vienna basin]: [Austria] Geol. Bundesanst. Verh., nos. 1-2, p. 212-232, illus., table, 1967.

267-005 **Davis, G. L.; Hart, S. R.; Tilton, G. R.** Some effects of contact metamorphism on zircon ages: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 27-34, illus., tables, 1968.

Davis, G. L. See *Hart, S. R. 267-013*

Davis, G. L. See *Hart, S. R. 272-012*

273-237 **Davis, Gregory A.** Tectonic correlations, Klamath Mountains and western Sierra Nevada, California: Geol. Soc. America Bull., v. 80, no. 6, p. 1095-1108, illus., 1969.

Davis, L. A. See *Gordon, R. B. 269-221*

Davis, L., Jr. See *Jones, D. E. 273-345*

Davis, L. R. See *Sonnerup, B. U. O. 272-301*

Davis, Leverett, Jr. See *Belcher, J. W. 272-303*

Davis, Leverett, Jr. See *Coleman, Paul J., Jr. 273-333*

Davis, R. J. See *Binns, R. A. 270-038*

272-204 **Davis, Richard W.** A rift valley gravity profile in southern Malawi: Geol. Soc. America Bull., v. 80, no. 5, p. 893-894, illus., 1969.

Davis, T. N. See *Belon, A. E. 268-373*

Davydchenko, A. G. See *Butuzov, V. P. 268-158*

8-192 **Davydov, K. I.** O sposobakh opredeleniya impedansa neodnorodnykh sred po dannym MTP-MTZ [On ways of determining the impedance of inhomogeneous mediums from data of magnetotelluric profiling and sounding]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 7, p. 95-103, illus., tables, 1968.

7-271 **Davydov, M. S.; Ryabikov, Yu. K.** O termobimetallicheskoy temperaturnoy kompensatsii v gravimetrakh [On thermocouple temperature compensation in gravimeters]: Razved. Geofizika, no. 26, p. 69-76, illus., 1968.

-499 **Davydov, N. G.; Sapozhnikov, R. B.** Primeneniye kompleksa geofizicheskikh metodov dlya issledovaniya solyanokupol'noy tektoniki [Use of a combination of geophysical methods to investigate salt dome tectonics]: Razved. Geofizika, no. 23, p. 84-88, illus., 1967.

-273 **Davydov, N. G.** K geotektonicheskomu stroyeniyu Yugo-Vostochnogo Karatau po geofizicheskim dannym [On the geotectonic structure of the southeastern Karatau according to geophysical data]: Razved. Geofizika, no. 27, p. 66-71, illus., 1968.

-219 **Davydov, N. G.** Effektivnost' primeneniya vysokotochnoy gravirazvedka v Yuzhnom Kazakhstane [Effective use of high-precision gravity surveying in Southern Kazakhstan]: Razved. Geofizika, no. 29, p. 90-95, illus., 1968.

-185 **Davydov, V. M.** Pole gorizontal'nogo elektricheskogo dipolya, raspolozhennogo nad dvuosnoy anizotropnoy sredoy [The field of a horizontal electrical dipole situated above a biaxial anisotropic medium]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 101-105, 1967.

-250 **Davydov, V. M.** Vliyaniye neprovodyashchego tela na rezul'taty chastotnogo zondirovaniya [Effect of a nonconducting body on the results of frequency sounding]: Razved. Geofizika, no. 24, p. 65-72, illus., 1967.

-192 **Davydov, V. M.** Elektromagnitnoye pole proizvol'nogo istochnika nad pologimi strukturami [The electromagnetic field of an arbitrary source above gentle structures]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 83-91, illus., 1968.

-135 **Davydov, V. M.; Tsekov, G. D.; Sidel'nikova, T. A.** O roli sposoba vozbuzhdeniya i registratsii polya v strukturnoy elektrorazvedke [On the role of the method of generating and recording the field in structural electrical surveying]: Neftegazovaya Geologiya i Geofizika, no. 11, p. 37-40, illus., 1968.

-149 **Davydov, V. M.** Stanovleniye elektromagnitnogo polya v prisutstvii tonkogo anizotropnogo sloya [Electromagnetic field buildup in the presence of a thin anisotropic layer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 58-71, illus., tables, 1969.

Davydova, N. I. See *Vol'vovskiy, I. S. 273-465*

424 **Dawson, Woodson H.** Geophysical exploration in the Illinois Basin, *in* Geology and petroleum production of the Illinois Basin, a symposium—Illinois and Indiana-Kentucky Geol. Socs.: Mt. Vernon, Ill., Illinois Oil and Gas Assoc., p. 263, 1968.

492 **Dawson-Grove, G. E.; Palmer, K. R.** A practical approach to analysis of logs by computer, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. E1-E11, tables, 1968.

474 **Dawson-Grove, G. E.** Sonar Caliper applications in Western Canada, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. E1-E14, illus., 1969.

Day, A. A. See *Coleman, P. J. 264-259*

Day, H. W. See *Giletti, Bruno J. 269-014*

265-191 **De, S. S.** SH-waves from a finite line source: Pure and Appl. Geophysics, v. 69, 46-59, illus., 1968.

266-185 **De, Tapan Kumar.** On Love waves in heterogeneous media: Pure and App Geophysics, v. 70, no. 2, p. 18-21, 1968.

270-186 **deBooy, Tom.** Mobility of the Earth's crust—A comparison between the prese and the past: Tectonophysics, v. 6, no. 3, p. 177-206, illus., 1968.

267-137 **DeBremaecker, J. Cl.** Comment on paper by LeRoy M. Dorman, "Anelastici and the spectra of body waves": Jour. Geophys. Research, v. 73, no. 22, p. 714 1968.

DeCarli, P. S. See *Carter, N. L. 264-040*

DeCarli, P. S. See *Wong, J. Y. 265-261*

273-062 **deCarli, Paul S.** Observations of the effects of explosive shock on crystalli solids, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 196 Proc.: Baltimore, Md., Mono Book Corp., p. 129-134, 1968.

269-348 **Decker, E. R.** Heat flow in Colorado and New Mexico: Jour. Geophys. Researc v. 74, no. 2, p. 550-559, illus., tables, 1969.

Decker, Edward R. See *Roy, Robert F. 264-276*

Decker, Edward R. See *Birch, Francis. 272-226*

267-616 **Decker, R. W.** A seismic event counter for active volcanoes: Seismol. Soc. Ame ica Bull., v. 58, no. 5, p. 1353-1358, illus., 1968.

270-449 **Decker, R. W.; Wright, T. L.** Deformation measurements on Mauna Loa V cano, Hawaii: Bull. Volcanol., v. 32, no. 2, p. 401, 1968.

Dedeyev, V. A. See *Zander, V. N. 265-306*

266-155 **Dedova, Ye. V.** Ostatochnyye deformatsii gruntov pri sil'nykh zemletryaseniya [Permanent deformation of grounds in strong earthquakes], *in* Kolebaniya ze lyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhener Seysmologii, no. 11, p. 114-122, illus., table, 1967.

DeFelice, J. See *Fireman, E. L. 266-047*

DeFord, Ronald K. See *Wilson, John Andrew. 264-014*

Défourneaux, M. See *Muller, W. F. 267-072*

Degens, E. T. See *Shata, A. 267-026*

265-355 **Dehlinger, P.; Couch, R. W.; Gemperle, M.** Continental and oceanic structu from the Oregon coast westward across the Juan de Fuca Ridge, *in* Symposium continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., 5, no. 4, pt. 2, p. 1079-1090, illus., 1968.

275-413 **Dehlinger, Peter.** Evidence regarding the development of Juan de Fuca a Gorda Ridges in the northeast Pacific Ocean: New York Acad. Sci. Trans., ser. 2, 31, no. 4, p. 379-403, illus., 1969.

274-068 **Dehousse, M. E.** Sur quelques observations de la Lune [On some observations the Moon]: Ciel et Terre, v. 84, nos. 1-2, p. 44-50, illus., table, 1968.

268-335 **Deicha, G.; Touray, J. C.** Les migrations du CO_2 à travers l'écorce terrestre e dégazage [The migrations of CO_2 across the Earth's crust and degassing], *in* In nat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geolog processes): Prague, Academia, p. 151-153, 1968.

4-296 **Deines, P.; Gold, D. P.** The change in carbon and oxygen isotopic composition during contact metamorphism of Trenton limestone by the Mount Royal pluton: Geochim. et Cosmochim. Acta, v. 33, no. 3, p. 421-424, illus., 1969.

6-298 **DeJong, Kees A.** Tettonica gravitativa e raccorciamento crostale nelle Alpi Meridionali [Gravity tectonics and crustal shortening in the Southern Alps (with English summ.)]: Soc. Geol. Italiana Boll., v. 86, no. 4, p. 749-776, illus., 1967.

Dekin, G. P. See *Suprunenko, O. I. 266-343*

Dekin, G. P. See *Tarasenko, T. V. 275-174*

9-023 **Delaloye, M.; Vuagnat, M.** Fichier de géochronométrie [Index of geochronometry]: Archives Sci., v. 21, no. 2, p. 187-211, 1968.

Delaloye, M. See *Laurent, R. 269-043*

Deleloye, Michel. See *Chessex, Ronald. 264-029*

Delhal, J. See *Cahen, L. 274-014*

Delibasis, N. See *Papazachos, B. 265-124*

Delibasis, N. D. See *Galanopoulos, A. G. 264-101*

Delibrias, G. See *Labeyrie, J. 269-035*

Delibrias, G. See *Labeyrie, J. 269-042*

-059 **Delibrias, G.; Rapaire, J. L.** Etude du mouvement propre d'une installation de comptage a bas niveau [Study of the background of a low-level counting device (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 603-612, illus., tables, 1967.

Delibrias, G. See *Leger, C. 269-106*

Delibrias, Georgette. See *Labeyrie, Jacques. 272-520*

-166 **Delitsyn, I. S.; Parkhomenko, E. I.; Silayeva, O. I.** Svyaz' struktury veshchestva s uprugimi i p'yezoelektricheskimi svoystvami na primere izucheniya obraztsa kvartsevykh tektonitov [Relationship of the structure of matter to its elastic and piezoelectrical properties, illustrated by study of samples of quartz tectonites], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 169-173, illus., tables, 1968.

114 **Dellwig, Louis Field; MacDonald, Harold C.; Kirk, J. Norman.** The potential of radar in geological exploration, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 747-764, illus., 1968.

150 **Delong, Borivoj.** Zur Berechnung der Genauigkeitscharakteristiken einer harmonischen Analyse [On the calculation of the accuracy characteristics of a harmonic analysis (with Russian summ.)]: Československá Akad. Věd Studia Geophys. et Geod., v. 13, no. 1, p. 88-90, 1969.

delPozo, S. See *Casaverde, M. 273-166*

DeMatteo, J. See *Bradley, C. L. 264-250*

Demenitskaya, R. M. See *Grushinskiy, N. P. 265-332*

265-360 **Demenitskaya, R. M.; Karasik, A. M.; Kiselev, Yu. G.; Litvinenko, I. V.; Ushakov, S. A.** The transition zone between the Eurasian continent and the Arctic Ocean, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1125-1129, illus., 1968.

265-366 **Demenitskaya, R. M.** Kora i mantiya Zemli [The crust and mantle of the Earth]: Moscow, Izdatel'stvo "Nedra," 280 p., illus., tables, 1967.

269-470 **Demenitskaya, R. M.; Karasik, A. M.; Trubyatchinskiy, N. N.** Anomal'noye magnitnoye pole osnovnykh okeanicheskikh struktur [Anomalous magnetic field of fundamental oceanic structures (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 62-67, illus., 1968.

273-278 **Demenitskaya, R. M.; Moskaleva, S. V.** O sushchestvovanii vnutrikorovogo rifta Urala [On the existence of a Ural intracrustal rift], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 227-231, 1968.

Demenitskaya, R. M. See *Gorodnitskaya, V. A. 273-325*

273-476 **Demenitskaya, R. M.; Kiselev, Yu. G.** Osobennosti stroyeniya, morfologii i osadochnogo chekhla tsentral'noy chasti khrebta Lomonosova po dannym seysmicheskikh issledovaniy [Features of the structure, morphology, and sedimentary cover in the central part of the Lomonosov Ridge according to data of seismic investigations], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5 Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 33-46, illus., 1968.

267-285 **Dement'yev, G. Ya.** Glubinnoye stroyeniye Magnitogorskogo megasinklinoriya po dannym geofiziki [Deep structure of the Magnitogorsk megasynclinorium from geophysical data], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 252-258, illus., 1968.

269-632 **Demen'tyev, G. Ya.; Shmakov, V. N.** Glubinnoye geologicheskoye stroyeniye Magnitogorskogo megasinklinoriya po geofizicheskim dannym [Deep geologic structure of the Magnitogorsk megasynclinorium according to geophysical data (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stv "Nauka," p. 123-128, illus., 1968.

Dement'yev, V. A. See *Mayorov, V. V. 270-392*

Dement'yeva, G. V. See *Budnikov, N. P. 275-193*

Demidenko, S. G. See *Semenenko, N. P. 273-020*

Demushkin, Yu. I. See *Begautdinov, A. K. 265-680*

271-505 **Den, N.; Ludwig, W. J.; Murauchi, S.; Ewing, John I.; Hotta, H.; Edgar, N. T. Yoshii, T.; Asanuma, T.; Hagiwara, K.; Sato, T.; Ando, S.** Seismic-refraction measurements in the Northwest Pacific basin: Jour. Geophys. Research, v. 74, no. 6, p 1421-1434, illus., table, 1969.

271-520 **Den, Nozomu; Murauchi, Sadanori; Hotta, Hiroshi; Asanuma, Toshio; Hagiwara Kenji.** A seismic refraction exploration of Tosa deep-sea terrace off Shikoku: Jou Physics Earth, v. 16, no. 1, p. 7-10, illus., table, 1968.

Dence, M. R. See *Taylor, F. C. 272-053*

273-075 **Dence, M. R.; Innes, M. J. S.; Robertson, P. B.** Recent geological and geophysica studies of Canadian craters, *in* Shock metamorphism of natural materials, 1st Conf. Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 339-362, illus tables, 1968.

Dence, M. R. See *Robertson, P. B. 273-082*

Dence, M. R. See *Bunch, T. E. 273-087*

275-044 **Dence, M. R.** Shock zoning at Canadian craters—Petrography and structural implications, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 169-184, illus., table, 1968.

Den'gin, E. V. See *Mokshantsev, K. B. 266-397*

Denisenko, Ye. A. See *Popov, Yu. N. 265-061*

274-026 **Denisenko, Ye. A.** K voprosu K-Ar-datirovaniya po valovym probam [On the problem of K-Ar dating on bulk samples]: Akad. Nauk SSSR Izv. Ser. Geol., no. 5, p. 111-122, illus., tables, 1969.

Denisik, S. A. See *Rezanov, R. A. 264-574*

272-552 **Denisik, S. A.; Rezvanov, R. A.; Lukhminskiy, B. Ye.** Rezul'taty rascheta prostranstvenno-vremennogo raspredeleniya neytronov v odnorodnom peschanike razlichnoy poristosti metodom Monte-Karlo [Results of calculation of the space-time distribution of neutrons in homogeneous sandstone of varied porosity by a Monte Carlo method], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 106-130, tables, 1968.

Denisik, S. A. See *Berzin, A. K. 272-568*

Denisik, S. A. See *Berzin, A. K. 272-569*

Denison, R. E. See *Burke, W. H. 270-001*

269-006 **Denison, Rodger E.; Kenny, George S.; Burke, William H., Jr.; Hetherington, Ernest A., Jr.** Isotopic ages of igneous and metamorphic boulders from the Haymond Formation (Pennsylvanian), Marathon Basin, Texas, and their significance: Geol. Soc. America Bull., v. 80, no. 2, p. 245-256, illus., tables, 1969.

273-154 **Denisov, B. Ye.** Opredeleniye chastot svobodnykh kolebaniy krupnopanel'nykh zdaniy na modelyakh s uchetom podatlivosti osnovaniya i stykovykh zoyedineniy [Determination of the frequency of the free vibrations of a prefabricated building taking into account the pliancy of the substratum and butt joints], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 28-43, illus., table, 1968.

Denisova, T. Ya. See *Makarevich, K. G. 275-220*

Dennis, C. L. See *Hilchie, D. W. 270-495*

Dennis, C. L. See *Hilchie, D. W. 272-541*

Dennis, C. L. See *Hilchie, D. W. 273-502*

Dennis, Leonard S. See *Taylor, Patrick. 266-486*

Denny, M. See *Springer, D. 266-174*

273-128 **DePanfilis, M.; Pannocchia, G.** Contributo ad uno studio sulla sismicità del Cuneese, i terremoti di Entracque del 7 Aprile 1966 [Contribution to a study of the seismicity of the Cuneo region, and the Entracque earthquakes of April 7, 1966 (with English summ.)]: Annali Geofisica, v. 21, no. 3, p. 325-339, illus., 1968.

274-122 **DePanfilis, M.** Sulla sismicità della zona di Scalea (Cosenza) [On the seismicity of the Scalea zone (Cosenza) (with English summ.)]: Annali Geofisica, v. 21, no. 1, p. 91-121, illus., 1968.

273-175 **Deppermann, Karl.** Zur Eliminierung der Störspannungen bei geoelektrischen Widerstandsmessungen [On the elimination of disturbing voltages in geoelectrical resistivity measurements (with English and French summ.)]: Geol. Jahrb., v. 85, p. 901-918, illus., 1968.

274-403 **Der, Zoltan A.** Surface wave components in microseisms: Seismol. Soc. America Bull., v. 59, no. 2, p. 665-672, illus., 1969.

270-505 **Deres, János.** Rétegsor-azonosítás Algyőn a felsőpannon produktív ősszeletben MINSK-2 elektronikus számítogép ségítségével [Identification of strata series in Algyő in the Upper Pannonian producing horizon with the aid of a MINSK-2 computer (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 172-177, illus., 1968.

275-436 **Deres, János; Márhoffer, József.** A gamma és neutron szelvények hitelesítési kérdéseiről [On questions of the calibration of gamma and neutron logs (with Russian and German summ.)]: Magyar Geofizika, v. 10, no. 1, p. 32-38, illus., 1969.

269-234 **Deresiewicz, Herbert.** Sul moto di particelle nella teoria della onde di Rayleigh [On the motion of particles in the theory of Rayleigh waves (with English summ.)]: Accad. Naz. Lincei Atti, Cl. Sci. Fis., Mat. e Nat. Rend., v. 44, no. 2, p. 227-231, illus., table, 1968.

273-469 **Dergachev, A. A.; Krylov, S. V.** K ispol'zovaniyu uprugikh voln promyshlennykh vzryvov pri glubinnykh seysmicheskikh issledovaniyakh [On the use of the elastic waves from industrial explosions in deep seismic investigations (with English summ. p. 154)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 87-94, illus., 1968.

Derkevich, M. D. See *Chernovskiy, M. I. 265-659*

270-056 **Dermott, S. F.** On the origin of commensurabilities in the solar system—[Pt.] 1, The tidal hypothesis: Royal Astron. Soc. Monthly Notices, v. 141, no. 3, p. 349-361, illus., tables, 1968.

270-057 **Dermott, S. F.** On the origin of commensurabilities in the solar system—[Pt.] 2, The orbital period relation: Royal Astron. Soc. Monthly Notices, v. 141, no. 3, p. 363-376, illus., tables, 1968.

269-351 **Derpgol'ts, V. F.** Geotermicheskiye osobennosti odnogo iz uchastkov Yeniseyskogo sektora Arktiki [Geothermal features of one of the tracts of the Yenisei sector of the Arctic]: Akad. Nauk SSSR Doklady, v. 179, no. 5, p. 1091-1093, illus., tables, 1968.

271-067 **Deshpande, B. G.** Trends of upward movements along the west coast: Indian Geophys. Union Jour., v. 5, no. 1, p. 28-29, 1967.

267-115 **Despeyroux, J.** Le séisme de Skopje – Ses enseignements en matière de protection antisismique. Aperçu des problèmes de la construction antisismique en Yougoslavie et de la reconstruction de Skopje [The Skopje earthquake—Its teachings on the subject of antiseismic protection. Glance at problems of antiseismic construction in Yugoslavia and on the reconstruction of Skopje], *in* The Skopje earthquake 1963: Amsterdam, Netherlands, UNESCO, p. 9-34, illus., 1968.

268-134 **Despeyroux, J.** Les enseignements du séisme de Skopje du 26 juillet 1963 [Lessons from the Skopje earthquake of July 26, 1963], *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 103-109, 1968.

272-032 **Dessila-Codarcea, Marcela.** Relations géologiques dans les terrains intensémen métamorphisés de Roumanie et considérations sur les dates géochronologique (potassium-argon) [Geologic relations in the intensely metamorphosed terranes o Rumania and considerations of geochronologic dates (potassium-argon)]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géologie, v. 12, no. 2, p. 161 182, illus., tables, 1968.

Dessler, A. J. See *Schield, M. A. 268-380*

264-551 **Detterman, Robert L.** Recent volcanic activity on Augustine Island, Alaska: U.S. Geol. Survey Prof. Paper 600-C, p. C126-C129, illus., 1968.

265-083 **Deuser, W. G.** Iron-magnesium-aluminum relationships in achondrites: Chem. Geology, v. 3, no. 2, p. 81-87, illus., table, 1968.

Deutsch, S. See *Hanappe, F. 265-077*

275-208 **Devdariani, A. S.** Izmereniye peremeshcheniy zemnoy poverkhnosti [Measurement of displacements of the Earth's surface]: Moscow, Akad. Nauk SSSR Inst. Geografii, 243 p., 1964.

274-019 **Devereux, I.; McDougall, Ian; Watters, W. A.** Potassium-argon mineral dates on intrusive rocks from the Foveaux Strait area: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1230-1237, table, 1968.

267-362 **Devereux, Ian.** Oxygen isotope ratios of minerals from the regionally metamorphosed schists of Otago, New Zealand: New Zealand Jour. Sci., v. 11, no. 3, p. 526-548, illus., tables, 1968.

Devirts, A. L. See *Vinogradov, A. P. 265-027*

Devirts, A. L. See *Vinogradov, A. P. 265-028*

Devirts, A. L. See *Vinogradov, A. P. 267-373*

272-035 **Devirts, A. L.; Markova, N. G.; Serebryannyy, L. R.** Kontrol' geologicheskoy otsenki vozrasta drevneberegovykh obrazovaniy Baltiyskogo morya po C-14 [Control of geologic estimation of the age of ancient coastal formations of the Baltic Sea by means of C-14]: Akad. Nauk SSSR Doklady, v. 182, no. 6, p. 1387-1390, illus., table, 1968.

275-404 **Devore, George W.** Elastic strain and preferred orientation in monoclinic crystals: Lithos, v. 2, no. 1, p. 9-24, illus., tables, 1969.

DeWald, O. E. See *Bassinger, B. G. 271-376*

DeWald, Omar. See *Lattimore, Robert K. 265-455*

274-423 **Dewart, Gilbert.** Seismic investigation of ice properties and bedrock topography at the confluence of two glaciers, Kaskawulsh Glacier, Yukon Territory, Canada: Ohio State Univ. Inst. Polar Studies Rept. 27, 207 p., illus., tables, 1968.

Dewes, F. C. D. See *Buchan, S. 264-535*

272-096 **Dewey, James; Byerly, Perry.** The early history of seismometry (to 1900): Seismol. Soc. America Bull., v. 59, no. 1, p. 183-227, illus., 1969.

269-298 **Dewey, John; Kay, Marshall.** Appalachian and Caledonian evidence for drift in the North Atlantic, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 161-167, illus., 1968.

267-073 **deWys, J. Negus.** Surveyor 6 magnet experiment: Jour. Geophys. Research, v. 73, no. 22, p. 6915-6924, illus., 1968.

267-078 **deWys, J. Negus.** Magnet experiment—Electromagnetic properties of the lunar surface: Jour. Geophys. Research, v. 73, no. 22, p. 7193-7208, illus., tables, 1968.

deWys, J. Negus. See *Muhleman, D. O. 268-082*

deWys, J. Negus. See *Muhleman, D. O. 275-075*

DeWys, Jane Negus. See *Wade, F. Alton. 264-080*

Deynikhovskaya, N. A. See *Blokh, I. M. 270-152*

274-261 **Dhar, R. L.; Roy, Amalendu.** Interpretation of vertical gravity and magnetic profiles: Pure and Appl. Geophysics, v. 73, p. 25-38, illus., 1969.

274-434 **D'Hoeraene, J.; Wlodarczak, R.** Protee, a self-adapting deconvolution and deringing program: Geophys. Prosp. [Netherlands], v. 16, no. 3, p. 359-391, illus., 1968.

272-142 **Dibaj, Mostafa; Penzien, Joseph.** Response of earth dams to traveling seismic waves: Am. Soc. Civil Engineers Proc., v. 95, paper 6453, Jour. Soil Mechanics and Found. Div., no. SM 2, p. 541-560, illus., table, 1969.

266-283 **Dibblee, Thomas W., Jr.** Displacements on the San Andreas fault system in the San Gabriel, San Bernardino, and San Jacinto Mountains, southern California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 260-276, illus.; discussion, p. 276-278, 1968.

268-090 **Dickel, J. R.; Warnock, W. W.; Medd, W. J.** Lack of phase variation of Venus: Nature, v. 220, no. 5173, p. 1183-1185, illus., table, 1968.

271-181 **Dickey, D. D.** Fault displacement as a result of underground nuclear explosions, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 219-232, illus., 1968.

Dickinson, D. J. See *Benseman, R. F. 267-298*

266-117 **Dickinson, G. E.; Adams, R. D.** A statistical survey of earthquakes in the main seismic region of New Zealand—Pt. 3, Geographical distribution: New Zealand Jour. Geology and Geophysics, v. 10, no. 4 (Seismol. Observatory, Wellington, Bull. S 145), p. 1040-1050, illus., 1967.

267-009 **Dickinson, Robert G.; Leopold, Estella B.; Marvin, Richard F.** Late Cretaceous uplift and volcanism on the north flank of the San Juan Mountains, Colorado, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 125-148, illus., tables, 1968.

Dickinson, William R. See *Stanford Univ. School Earth Sci. 266-267*

Didenko, S. I. See *Merkulov, V. I. 270-534*

Didenko, S. I. See *Amirov, A. N. 275-451*

271-238 **Didenko-Kishtsyna, L. K.** Noveyshaya tektonika Dzhungarskogo Alatau [Recent tectonics of the Dzhugarian Alatau], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 117-124, illus., 1968.

Didier, J. See *Babin, C. 270-211*

Didier, J. See *Babin, C. 274-456*

273-477 **Dieterich, J. H.; Onat, E. T.** Slow finite deformations of viscous solids: Jour. Geophys. Research, v. 74, no. 8, p. 2081-2088, illus., 1969.

Dietrich, J. A. See *Hoover, D. B. 273-116*

264-298 **Dietrich, R. A.** A geobarometer for certain migmatites: Finlande Comm. Géol. Bull., no. 229, p. 3-9, illus., 1967.

264-300 **Dietrich, R. V.** Reply [to discussion by V. Marmo of "Geobarometer for certain migmatites" (1967)]: Finlande Comm. Géol. Bull., no. 229, p. 16, 1967.

269-007 **Dietrich, R. V.; Fullagar, P. D.; Bottino, M. L.** K/Ar and Rb/Sr dating of tectonic events in the Appalachians of southwestern Virginia: Geol. Soc. America Bull., v. 80, no. 2, p. 307-313, illus., tables, 1968.

269-097 **Dietz, Robert.** Shatter cones and star wounds: New Scientist, v. 40, no. 625, p. 501-503, illus., 1968.

266-254 **Dietz, Robert S.** Reply [to "Arthur Holmes—Originator of spreading ocean floor hypothesis," by A. A. Meyerhoff (1968)]: Jour. Geophys. Research, v. 73, no. 20, p. 6567, 1968.

267-608 **Dietz, Robert S.; Knebel, Harley J.; Somers, Lee H.** Cayar Submarine Canyon: Geol. Soc. America Bull., v. 79, no. 12, p. 1821-1828, illus., 1968.

Dietz, Robert S. See *Sproll, Walter P. 272-187*

273-070 **Dietz, Robert S.** Shatter cones in cryptoexplosion structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 267-285, illus., table, 1968.

273-494 **Dietz, Robert S.; Knebel, Harley J.** Survey of Ross's original deep sea sounding site: Nature, v. 220, no. 5169, p. 751-753, illus., 1968.

275-036 **Dietz, Robert S.; Fudali, Robert; Cassidy, William.** Richat and Semsiyat Domes (Mauritania)—Not astroblemes: Geol. Soc. America Bull., v. 80, no. 7, p. 1367-1372, illus., 1969.

269-635 **Dikenshteyn, G. Kh.; Starobinets, A. Ye.; Teplitskiy, V. A.** Primeneniye geofizicheskikh metodov dlya izucheniya struktury osadochnogo chekhla i fundamenta Vostochnoy Turkmenii v svyazi s poiskami nefti i gaza [Use of geophysical methods to study the structure of the sedimentary cover and basement of East Turkmenia in connection with oil and gas prospecting (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 180-185, illus., 1968.

274-194 **Dikmarova, L. P.** Resheniye prostranstvennoy zadachi v metode vrashchayushchego magnitnogo polya [Solution of the spatial problem in the rotating magnetic field method], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 33-41, illus., 1965.

274-195 **Dikmarova, L. P.** Analiz sposobov oriyentatsii generatornogo i priyemnogo dipoley v induktsionnykh ustanovkakh s gorizontal'noy bazoy [Analysis of ways of orienting the generator and receiver dipoles in induction setups with horizontal base], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 42-50, illus., tables, 1965.

264-538 **Dill, Robert F.** Effects of explosive loading on the strength of sea-floor sands, *in* Marine geotechnique—Internat. Research Conf., Monticello, Ill., 1966, Proc.: Urbana, Ill., Univ. Illinois Press, p. 291-303, illus., tables, 1967.

269-192 **Dill, Robert F.** Earthquake effects on fill of Scripps Submarine Canyon: Geol. Soc. America Bull., v. 80, no. 2, p. 321-327, illus., table,99.

Dill, Robert F. See *Shepard, Francis P. 269-674*

274-486 **Dillon, Ed L.** Problems inherent in the computer processing of well log data, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. U1-U6, table, 1969.

272-202 **Diment, W. H.** Gravity anomalies in northwestern New England, Chap. 30 *in* Studies of Appalachian geology, northern and marine (Zen, E-an, and others, editors): New York and London, Interscience Publishers, p. 399-413, illus., 1968.

Dimsdale, B. See *Taylor, R. E. 265-007*

Dincer, T. See *Davis, G. H. 264-317*

265-687 **Ditev, A. A.; Sazonov, A. M.** Kommutator dlya skvazhinnogo snaryada apparatury YaMK, rabotayushchey na printsipe svobodnoy yadernoy pretsessii [A commutator for the well cartridge of nuclear magnetic logging apparatus operating on the principle of free nuclear precession]: Geofiz. Apparatura, no. 32, p. 63-66, illus., 1967.

269-110 **Divari, N. B.; Klikh, Yu. A.** O vliyanii pryamogo svetovogo davleniya Solntsa na dvizheniye chastits okolozemnogo pylevogo oblaka [On the effect of direct light pressure of the Sun on the motion of particles in the circumterrestrial dust cloud (with English summ.)]: Astron. Zhur., v. 44, no. 4, p. 840-848, illus., table, 1967.

264-170 **Dizioğlu, M. Y.** Interpretation of the secondary electromagnetic field by analytic continuation: Annali Geofisica, v. 20, no. 4, p. 415-423, 1967.

264-171 **Dizioğlu, M. Y.** A comparative study of induced polarization parameters as a result of its application to a known lead-zinc occurrence in Turkey, *in* Seminar on field techniques for mineral investigation, Tehran, Iran, 1965: Ankara, Turkey, Central Treaty Organization, p. 119-132, illus., 1966.

265-263 **Dizioğlu, Mehmet Y.** A method for determining true chargeabilities of vertical discontinuities and its application to some types of lead-zinc ores in Turkey: Gerlands Beitr. Geophysik, v. 77, no. 3, p. 195-204, illus., table, 1968.

Dmitriyev, L. P. See *Mirchink, M. F. 269-278*

Dmitriyev, L. P. See *Mirchink, M. F. 275-372*

264-181 **Dmitriyev, V. I.** O raschete magnitotelluricheskogo polya v sloye s proizvol'nym izgibom nizhney poverkhnosti v sluchaye H-polyarizatsii [On calculating the magnetotelluric field in a layer with arbitrary curvature of the lower surface in the case of H-polarization]: Prikladnaya Geofizika, no. 51, p. 93-100, 1968.

Dmitriyev, V. I. See *Van'yan, L. L. 264-378*

Dmitriyev, V. I. See *Kokotushkin, G. A. 268-184*

Dmitriyev, V. I. See *Vladimirov, N. P. 273-190*

272-505 **Dmitriyeva, G. A.** Analiz krivykh raspredeleniya proslezhivayemosti otrazhayushchikh gorizontov na territorii Ust'-Yeniseyskoy sineklizy [Analysis of the curves of distribution of traceability of reflecting horizons in the territory of the Ust-Yenisei syneclise]: Nauchno-Issled. Inst. Geologii Arktiki, Uchenyye Zapiski, Regional'naya Geologiya, no. 13, p. 189-194, illus., 1968.

271-165 **Dobaczewska, W.** Connection of two geodetic systems by observations of artificial satellites of the Earth: Bull. Geod., no. 88, p. 169-174, 1968.

Dobkina, E. I. See *Vinogradov, A. P. 265-027*

Dobkina, E. I. See *Vinogradov, A. P. 265-028*

Dobkina, E. I. See *Vinogradov, A. P. 267-373*

272-384 **Dobrev, T. B.; Ivanova, V. I.; Pishchalov, S. S.** Kharakteristika glubinnykh razlomov tsentral'noy chasti zapadnoy Bolgarii po geomagnitnom dannym [Character of the abyssal faults of the central part of western Bulgaria according to geomagnetic data (with German summ. and captions)]: Geophysik u. Geologie, no. 12, p. 56-66, illus., 1968.

Dobrokhotova, S. V. See *Vorob'yev, A. A. 270-163*

269-033 **Dockins, K. O.; Bainbridge, A. E.; Houtermans, J. C.; Suess, H. E.** Tritium in the mixed layer of the North Pacific Ocean, *in* Radioactive dating and methods of low-level countingOIAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 129-141, illus., tables, 1967.

267-060 **Dodd, R. T.** Recrystallized chondrules in the Sharps (H-3) chondrite: Geochim. et Cosmochim. Acta, v. 32, no. 10, p. 1111-1120, illus., tables, 1968.

270-031 **Dodd, R. T.** Metamorphism of the ordinary chondrites—A review: Geochim. et Cosmochim. Acta, v. 33, no. 2, p. 161-203, illus., tables, 1969.

264-374 **Dodon, G.** Diurnal geomagnetic field variations according to the data of Ulan Bator observatory: Geomagnetism and Aeronomy, v. 8, no. 1, p. 91-93, illus., tables, 1968.

264-384 **Dodon, G.** Rapid variations of the geomagnetic field according to the data of Ulan Bator Observatory: Geomagnetism and Aeronomy, v. 8, no. 1, p. 155-157, illus., 1968.

264-386 **Dodon, G.** Diurnal pattern of the frequency of appearance of particular K indexes at Ulan Bator Observatory: Geomagnetism and Aeronomy, v. 8, no. 1, p. 158-159, illus., tables, 1968.

269-409 **Dodon, G.** Influence of global anomalies on Sq variations: Geomagnetism and Aeronomy, v. 8, no. 3, p. 414-419, illus., tables, 1968.

275-271 **Doe, B. R.; Tilling, R. I.; Hedge, C. E.; Klepper, M. R.** Lead and strontium isotope studies of the Boulder batholith, southwestern Montana: Econ. Geology, v. 63, no. 8, p. 884-906, illus., tables, 1968.

Doe, Bruce R. See *Muffler, L. J. Patrick. 265-009*

267-348 **Doe, Bruce R.** Lead and strontium isotopic studies of Cenozoic volcanic rocks in the Rocky Mountain region—A summary, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 149-174, tables, 1968.

Doell, R. R. See *Aitken, M. J. 266-020*

Doell, R. R. See *Cox, Allan. 266-446*

Doell, R. R. See *Cox, Allan. 269-427*

266-443 **Doell, Richard R.; Cox, Allan.** Reply [to comments by S. K. Runcorn on the term "virtual geomagnetic poles" (1968)]: Jour. Geophys. Research, v. 73, no. 18, p. 6139, 1968.

271-364 **Doell, Richard R.; Dalrymple, G. Brent; Smith, Robert L.; Bailey, Roy A.** Paleomagnetism, potassium-argon ages, and geology of rhyolites and associated rocks of the Valles Caldera, New Mexico, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, p. 211-248, illus., tables, 1968.

Doell, Richard R. See *Cox, Allan. 272-360*

264-006 **Doering, Willis P.** A rapid method for measuring the Rb/Sr ratio in silicate rocks: U.S. Geol. Survey Prof. Paper 600-C, p. C164-C168, tables, 1968.

274-040 **Dohnanyi, J. S.** Collisional model of asteroids and their debris: Jour. Geophys. Research, v. 74, no. 10, p. 2531-2554, illus., tables, 1969.

265-627 **Dohr, G.** Beobachtungen von Tiefenreflexionen im Oberrheingraben [Observations of deep reflections in the Upper Rheingraben], *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wüttemberg Geol. Landesamt Abh., no. 6pso Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 94-95, illus., 1967.

Doi, Hikaru. See *Kubotera, Akira. 275-235*

272-020 **Doig, Ronald; Barton, Jackson M., Jr.** Ages of carbonatites and other alkaline rocks in Quebec: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1401-1407, illus., table, 1968.

275-421 **Dole, Hollis M.** (editor). Andesite conference guidebook—Internat. Upper Mantle Proj. Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Industries Bull. 62, 107 p., illus., tables, 1968.

Dolgikh, V. V. See *Khalevin, N. I. 266-531*

Dolgikh, V. V. See *Khalevin, N. I. 267-203*

266-421 **Dolginov, Sh. Sh.** Discussion of paper by N. F. Ness, K. G. Behannon, C. S. Scearce, and S. K. Cantaro, "Early results from the magnetic field experiment on Lunar Explorer 35" [1967]: Jour. Geophys. Research, v. 73, no. 19, p. 6389-6390, 1968.

267-569 **Dolgirev, Ye. I.** K raschetu detektoruyushchey sistemy dlya izmereniya radioaktivnykh gazov [On the calculation of a detecting system for measuring radioactive gases]: Geofiz. Apparatura, no. 34, p. 133-135, illus., table, 1967.

270-347 **Dolgirev, Ye. I.; Sazonov, A. M.** Izotopnyye istochniki rentgenovskogo izlucheniya dlya energeticheskoy kalibrovki spektrometricheskoy apparatury [Isotopic sources of X-ray radiation for energy calibration of spectrometric apparatus]: Geofiz. Apparatura, no. 35, p. 69-74, illus., table, 1968.

272-064 **Dolgov, Yu. A.; Shugurova, N. A.; Pogrebnyak, Yu. F.** Gazovyye vklyucheniya v tektitakh (moldavitakh) [Gaseous inclusions in tektites (moldavites)]: Akad. Nauk SSSR Doklady, v. 184, no. 6, p. 1405-1408, illus., tables, 1969.

274-252 **Dolgushin, L. D.** Novyye dannyye o skorostyakh dvizheniya lednikov Antarktidy [New data on the rate of ice movement in Antarctica]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 56, p. 17-20, 1966.

275-447 **Dolina, L. P.; Ivanchuk, L. F.** K voprosu ob izuchenii pronitsayemosti produktivnykh gorizontov XIII-XVII mestorozhdeniya Uzen' po promyslovo-geofizicheskim dannym [On the problem of studying the permeability of producing horizons XIII-XVII of the Uzen field on the basis of geophysical well logging data]: Neftegazovaya Geologiya i Geofizika, no. 2, p. 37-41, illus., 1969.

Dolitskaya, T. V. See *Dolitskiy, V. A. 267-633*

265-304 **Dolitskiy, A. V.** Osevaya simmetriya lineymykh strukturnykh elementov zemnoy kory [Axial symmetry of linear structural elements of the Earth's crust]: Akad. Nauk SSSR Doklady, v. 177, no. 1, p. 159-162, illus., 1967.

270-196 **Dolitskiy, A. V.** Global'nyye strukturnyye plany, ikh perestroyka i dvizheniye geograficheskikh polyusov [Global structural plans, their reconstruction, and movement of the geographic poles]: Akad. Nauk SSSR Doklady, v. 184, no. 1, p. 171-174, illus., 1969.

271-371 **Dolitskiy, A. V.** Movement of the Earth's crust and the geomagnetic field: Geomagnetism and Aeronomy, v. 8, no. 4, p. 592-596, illus., tables, 1968.

267-633 **Dolitskiy, V. A.; Dolitskaya, T. V.; Kucheruk, Ye. V.** Srednedevonskiy rifovyy massiv na Klenovskoy razvedochnoy ploshchadi (Volgogradskaya oblast') [A Middle Devonian reef massif in the Klenov exploration area (Volgograd district)]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 8, p. 43-46, illus., 1968.

266-248 **Dolivo-Dobrovol'skiy, A. V.; Koshechkin, B. I.; Podol'skiy, Yu. V.; Semenova, M. N.** Predvaritel'nyye itogi razrabotki i primeneniya kompleksa aerometodov dlya tseley kartirovaniya dokembriyskikh obrazovaniy Kol'skogo poluostrova [Preliminary results of working out and using combined airborne methods for purposes of mapping the Precambrian formations of the Kola Peninsula], *in* Problemy izucheniya geologii dokembriya—Vses. Soveshchaniye po voprosam izucheniya i metodiki kartirovaniya dokembriyskikh obrazovaniy, Kirovsk 1964, materialy: Leningrad, Izdatel'stvo "Nauka," p. 212-221, illus., 1967.

268-094 **Dolifus, Audouin.** Résultats récents sur les planètes Mercure, Venus et Mars, obtenus par les observations astronomiques au sol [Recent results on the planets Mercury, Venus and Mars, obtained by astronomical observations of the surface], *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 1-25, illus., 1968.

272-085 **Dolifus, Audouin.** Détermination optique du diamètre de la planète Vénus [Optical determination of the diameter of the planet Venus]. Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 23, p. 1301-1304, illus., 1968.

273-380 **Dominici, P.** Metodo a variazione di frequenza per la misurazione della suscettività magnetica delle rocce [Frequency variation method for the measurement of the magnetic susceptibility of rocks (with English summ.)]: Annali Geofisica, v. 21, no. 3, p. 265-286, illus., table, 1968.

270-044 **Donahue, T. M.** Deuterium in the upper atmospheres of Venus and Earth: Jour. Geophys. Research, v. 74, no. 5, p. 1128-1137, illus., tables, 1969.

Donald, R. A. H. See *Shepherd, R. 270-416*

273-251 **Donath, F. A.** Experimental study of kink-band development in Martinsburg Slate, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 255-288, illus.; discussion, p. 288-293, 362, 1969.

272-492 **Donato, R. J.; Hobson, George D.** Transit sonar measurements in Lake Ontario off the mouth of the Niagara River, *in* Conf. on Great Lakes research, 11th, Milwaukee, Wis., 1968, Proc.: Ann Arbor, Mich., Internat. Assoc. Great Lakes Research, p. 179-187, illus., 1968.

275-201 **Donnelly, Thomas W.** Caribbean island-arcs in light of the sea-floor spreading hypothesis: New York Acad. Sci. Trans., ser. 2, v. 30, no. 6, p. 745-750, illus., 1968.

266-262 **Donner, J. J.** The late-glacial and postglacial shoreline displacement in southwestern Finland, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 367-373, illus., 1968.

268-606 **Donovan, D. T.** Geology of the continental shelf around Britain—A survey of progress, *in* Geology of shelf seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver and Boyd, p. 1-14, illus., 1968.

266-416 **Dontsova, E. I.** Application of oxygen isotope ratios in geochemical research, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 672-679, illus., table, 1967; Russian text, Opyt primeneniya izotopnykh sootnoshenii kisloroda v geokhimicheskikh issledovaniyakh, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

269-378 **Dontsova, E. I.** Distribution of oxygen isotopes in minerals and rocks and the problem of their genesis, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 67-78, illus., tables, 1968.

Dontsova, Ye. I. See *Milovskiy, A. V. 272-293*

275-296 **Dontsova, Ye. I.** Opyt primeneniya izotopnykh sootnosheniy kisloroda v geokhimicheskikh issledovaniyakh [Attempt to use the isotopic ratios of oxygen in geochemical investigations], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 631-637, illus., table, 1964.

269-018 **Donville, B.; Pagani, A.** Réalisation d'un four pour la purification de gas par de la mousse de titane [Making of a furnace for purification of gas by titanium sponge]: *in* Études géochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Géologie et Minéralogie, no. 36, pt. 16, p. 7-12, illus., 1967.

269-017 **Donville, Bernard.** Problèmes technologiques de jonction des canalisations metalliques en ultra-vide [Technological problems of joining of metallic conduits in ultra-vacuum], *in* Études géochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Géologie et Minéralogie, no. 36, pt. 16, p. 1-6, illus., 1967.

269-333 **Dooley, J. C.** A common gravity datum and calibration lines for independent surveys in Australia, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 456-462, illus., 1967.

270-498 **Dorin, A. H.; Chase, A. E.** A guide to improved formation evaluation in carbonates of northwestern Alberta, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. [M]1-[M]19, illus., tables, 1968.

266-405 **Dorman, F. H.** Some Australian oxygen isotope temperatures and a theory for a 30-million-year world-temperature cycle: Jour. Geology, v. 76, no. 3, p. 297-313, illus., tables, 1968.

Dorman, James. See *Barazangi, Muawia. 272-101*

266-434 **Dorman, L. I.** Variatsii kosmicheskikh luchey i problemy solnechno-zemnoy fiziki [Cosmic ray variations and problems of solar-terrestrial physics]: Akad. Nauk SSSR Vestnik, no. 4, p. 51-54, 1968.

275-389 **Dorman, M. I.; Kusov, T. R.** Seysmologicheskaya kharakteristika geologicheskikh razrezov Zapadnoy Yakutii [Seismogeologic characteristics of the geologic sections of western Yakutia (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 105-115, illus., 1969.

Dorofeyev, B. V. See *Anan'yeva, Ye. M. 267-202*

267-237 **Dorofeyev, B. V.** Razvitiye sopryazhennykh aktivizirovannykh zon na Urale [Development of associated activated zones in the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 139-146, illus., table, 1968.

264-525 **Doroginitskaya, L. M.; Telezhenko, V. P.; Frolova, L. A.** Eksperimental'noye izucheniye koeffitsiyentov otrazheniya i skorostey rasprostraneniya uprugikh voln v poristykh sredakh, nasyshchennykh flyuidami [Experimental study of coefficients of reflection and velocities of propagation of elastic waves in porous mediums saturated by fluids]: Sibir. Nauchno-Issled. Inst. Geologii, Geofiziki Mineral'nogo Syr'ya, Trudy, no. 30, p. 98-110, illus., 1964.

273-280 **Dorrer, Egon; Hofmann, Walther; Seufert, Wilfried.** Geodetic results of the Ross Ice Shelf survey expeditions, 1962-63 and 1965-66: Jour. Glaciology, v. 8, no. 52, p. 67-90, illus., tables, 1969.

264-164 **Dortman, N. B.; Magid, M. Sh.** Novyye dannyye o skorosti uprugikh voln v kristallicheskikh porodakh i yeye zavisimost' ot vlazhnosti [New data on the velocity of elastic waves in crystalline rocks and its dependence on moisture content]: Sovetskaya Geologiya, no. 5, p. 123-129, illus., tables, 1968.

266-483 **Dortman, N. B.; Zhdanov, V. V.** Petrofizicheskiye issledovaniya pri geologicheskom kartirovanii dokembriyskikh obrazovaniy [Petrophysical investigations in geologic mapping of Precambrian formations], *in* Problemy izucheniya geologii dokembriya—Vses. Soveshchaniye po voprosam izucheniya i metodiki kartirovaniya dokembriyskikh obrazovaniy, Kirovsk 1964, materialy: Leningrad, Izdatel'stvo "Nauka," p. 235-242, illus., 1967.

269-448 **Dortman, N. B.** Petrofizicheskaya kharakteristika drevenykh shchitov, skladchatykh oblastey i zon tektonicheskoy aktivizatsii [Petrophysical characteristics of ancient shields, folded regions, and zones of tectonic activation (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 161-168, illus., table, 1968.

270-177 **Dortman, N. B.** Petrofizicheskaya kharakteristika kristallicheskikh gornykh porod i sostavleniye petrofizicheskikh kart [Petrophysical description of crystalline rocks and the plotting of petrophysical maps], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 49-54, illus., 1968.

271-252 **Doskach, A. G.** K voprosu ob etapakh neotektonicheskogo razvitiya Turgayskogo progiba [On the problem of the stages of neotectonic development of the Turgay depression], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 201-207, illus., 1968.

264-165 **Dosso, H. W.; Jacobs, J. A.** Analogue model measurements of electromagnetic variations in the near field of an oscillating line current: Canadian Jour. Earth Sci., v. 5, no. 1, p. 23-29, illus., 1968.

Doughty, Philip S. See *Meighan, Ian G. 275-045*

Douglas, A. See *Lilwall, R. C. 267-111*

267-146 **Douglas, A.; Lilwall, R. C.** Does epicentre source bias exist,: Nature, v. 220, no. 5166, p. 469-470, tables, 1968.

Douglas, A. See *Lilwall, R. C. 275-136*

Douglas, Bruce C. See *Wagner, Carl A. 267-254*

274-123 **Doyle, H. A.; Cleary, J. R.; Gray, N. M.** The seismicity of the Sydney Basin: Geol. Soc. Australia Jour., v. 15, pt. 2, p. 175-181, illus., table, 1968.

274-124 **Doyle, H. A.; Everingham, I. B.; Sutton, D. J.** Seismicity of the Australian continent: Geol. Soc. Australia Jour., v. 15, pt. 2, p. 295-312, illus., tables, 1968.

Dragašević, T. See *Subbotin, S. I. 265-350*

Dragašević, T. See *Subbotin, S. 267-581*

269-630 **Dragašević, Tihomir.** The possibility of creating reflected waves at some lithostratigraphic boundaries in the southeast Dinaric Alps: [Yugoslavia] Zavod Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, ser. C, nos. 4-5, 1963-64, English edition, p. 13-27, illus., table, 1966.

70-506 **Drahos, Dezso.** Többtekercsesindukciós szondák radialis karakteristikainak vizsgalata [Investigation of the radial characteristics of multicoil induction sondes (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 198-200, illus., table, 1968.

Drake, Charles. See *Ward, Peter L. 269-181*

265-348 **Drake, Charles L.; Ewing, John I.; Stockard, Henry.** The continental margin of the eastern United States, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 993-1010, illus., 1968.

Drake, Charles L. See *Nafe, John E. 267-314*

Drake, Charles L. See *Knopoff, Leon. 268-308*

268-314 **Drake, Charles L.; Nafe, John E.** The transition from ocean to continent from seismic refraction data, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 174-186, illus., 1968.

Drake, Charles L. See *Sheridan, R. E. 274-417*

Drakopoulos, J. See *Comninakis, P. 274-121*

Dresen, Lothar. See *Behrens, Jorn. 272-147*

Dresen, Lothar. See *Behrens, Jorn. 273-458*

Drew, Charles M. See *Engel, Albert E. J. 264-002*

Dreyer, Henri. See *Naudy, Henri. 265-459*

Driatskiy, V. M. See *Besprozvannaya, A. S. 264-355*

265-409 **Driatskiy, V. M.; Zhigalov, L. N.** Auroral absorption at Vostok station and its related magnetic activity [with French and Russian abs.]: Annales Geophysique, v. 24, no. 2, p. 661-664, illus., tables, 1968.

264-380 **Drobzhev, V. I.** Geomagnetic control of vertical ionization drift in the F region of the ionosphere: Geomagnetism and Aeronomy, v. 8, no. 1, p. 142, illus., 1968.

Drozdova, N. N. See *Khalevin, N. I. 268-353*

270-255 **Drummond, J. E.; Nelson, D. J.** Resistance of the magnetosphere: Jour. Geophys. Research, v. 74, no. 5, p. 1270-1274, 1969.

265-344 **Druzhinin, A. V.** K voprosu o vliyanii gidrogeologicheskogo faktora na geotemperaturnoye pole v usloviyakh vostoka Russkoy platformy [On the problem of the effect of the hydrogeologic factor on the geothermal field in the conditions of the eastern part of the Russian platform]: Neftegazovaya Geologiya i Geofizika, no. 6, p. 37-40, table, 1968.

Druzhinin, V. S. See *Khalevin, N. I. 267-203*

267-594 **Druzhinin, V. S.; Rybalka, V. M.; Khalevin, N. I.** Rezul'taty glubinnykh seysmicheskikh zondirovaniy na Sverdlovskom peresechenii i perspektivy dal'neyshikh issledovaniy Urala [Results of deep seismic sounding on the Sverdlovsk traverse and prospects of future investigations of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 69-79, illus., 1968.

Druzhinin, V. S. See *Bun'kov, A. M. 267-595*

273-468 **Druzhinin, V. S.; Kozyrev, Ye. I.; Rybalka, V. M.; Khalevin, N. I.; Chudakova, L. N.** Opyt registratsii glubinnykh otrazheniy v yugo-zapadnoy chasti Sibiri [Attempt to record deep reflections in the southwestern part of Siberia (with English summ. p. 154)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 75-86, illus., table, 1968.

Dubertret, Louis. See *Vachette, Mireille. 275-014*

Dubinchuk, V. T. See *Ferronskiy, V. I. 265-599*

Dubinskiy, I. B. See *Kostina, A. F. 265-165*

68-191 **Dubinskiy, V. N.; Smol'nikov, B. M.; Logvinov, I. M.** Pokhodzhennya ta vīk pechery Verteba na podīllī [Origin and age of the Verteb cave in Podolia (in Ukrainian with Russian and English summ.)]: Adad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 8, p. 724-728, illus., 1968.

Dubinyuk, P. F. See *Safarov, I. P. 264-596*

66-226 **Dublyanskiy, V. M.; Smol'nikov, B. M.; Pantyukhin, G. S.; Logvinov, I. M.** O blokovom stroyenii Dolgorukovskogo gornogo massiva v Krimu [On the block structure of the Dolgorukov mountain massif in Crimea (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 50-57, illus., 1967.

70-074 **Dubourdieu, Georges.** Sur les forces géologiques en action autour du Pacifique [On the geologic forces in action around the Pacific]: Paris, Collège de France, 62 p., illus., 1968.

65-645 **Dubrov, Ye. F.** Zvukovaya geolokatsiya [Acoustical geolocation]: Leningrad, Izdatel'stvo "Nedra," 110 p., illus., tables, 1967.

72-295 **Dubrova, N. V.; Nesmelova, Z. N.** Izotopnyy sostav ugleroda prirodnogo metana [The isotopic composition of carbon in natural methane (with English summ.)]: Geokhimiya, no. 9, p. 1066-1071, illus., tables, 1968.

Dubrovskiy, M. V. See *Gol'ts, S. I. 271-246*

Dubrovskiy, V. G. See *Gokhberg, M. B. 271-133*

73-186 **Dubrovskiy, V. G.; Faynberg, E. B.** Experience in the use of D_{st} variations for deep electromagnetic soundings: Geomagnetism and Aeronomy, v. 8, no. 5, p. 792-795, illus., 1968.

Duchaylard, Georges. See *Allegre, Claude-J. 274-300*

9-709 **Duchkov, A. D.; Serdyakov, V. A.** Skvazhinnyy termometr [A borehole thermometer]: Razved. Geofizika, no. 27, p. 86-89, illus., 1968.

5-117 **Duda, Severyn J.** Regional seismicity and seismic wave propagation from records at the Tonto Forest Seismological Observatory, Payson, Arizona: Annali Geofisica, v. 18, no. 4, p. 365-397, illus., tables, 1965.

Dudar', Yu. I. See *Bellavin, O. V. 268-272*

7-025 **Dudek, Arnošt; Smejkal, Václav.** Das Alter des Brünner Plutons [The age of the Brünner pluton (with Czech summ.)]: [Czechoslovakia] Ustred. Ustav. Geol. Vestnik, v. 43, no. 1, p. 45-51, illus., tables, 1968.

Duennebier, F. K. See *Northrop, J. 264-090*

Duennebier, Frederick K. See *Johnson, Rockne H. 268-112*

4-347 **Duffus, H. J.; Boyd, G. M.** The association between ULF geomagnetic fluctuations and Doppler ionospheric observations: Jour. Atmos. and Terrest. Physics, v. 30, no. 4, p. 481-496, illus., 1968.

7-208 **Dufour, H. M.** La determinazione della forma della Terra [Determination of the form of the Earth]: Boll. Geodesia e Sci. Affini, v. 26, no. 4, p. 521-550, illus., 1967.

1-161 **Dufour, H. M.** The whole geodesy without ellipsoid: Bull. Géod., no. 88, p. 125-143, illus., 1968.

272-245 **Duganov, G. V.** Die Geothermie der Lagerstätten als Hauptparameter bei de Steuerung der Wärmeverhältnisse tiefer Schächte [The geothermy of deposits a the main parameter in the control of heat conditions in deep mines]: Freiberge Forschungshefte C 238, p. 131-138, illus., 1968.

Dugdale, R. C. See *Forbes, Robert B. 270-435*

269-600 **Duguid, James Otto.** Reply by author to discussion by Lyle V. A. Sendlein [o "Refraction determination of water table depth and alluvium thickness." (1968)] Geophysics, v. 33, no. 6, p. 1020-1021, 1968.

273-094 **Duke, Michael B.** The Shergotty meteorite—Magmatic and shock metamorphic features, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md. 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 613-621, illus., tables, 1968.

275-056 **Duke, Michael B.** Surveyor alpha-scattering data—Consistency with lunar origi of eucrites and howardites: Science, v. 165, no. 3892, p. 515-517, illus., tables, 1969.

Dukhovskiy, A. A. See *Voznesenskiy, V. D. 267-266*

271-227 **Dumitrashko, N. V.** Problemy tektonicheskikh dvizheniy i noveyshikh struktu zemnoy kory [Problems of tectonic movements and recent structures of the Earth' crust], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kor (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 35-39, illus. 1968.

Dunayev, V. A. See *Ovchinnikov, L. N. 265-048*

267-043 **Dunayev, V. A.; Stepanov, A. I.; Panova, M. V.** Vliyaniye perekristallizatsii na iz meneniye K-Ar vozrasta biotita (na primere biotita iz Kopansko-Kusinskoy zony n Urale) [Effect of recrystallization on the variation of the K-Ar age of biotite (illus trated by biotite from the Kopansk-Kusin zone of the Urals) (with English summ.) Geokhimiya, no. 3, p. 275-280, illus., 1968.

Dunayev, V. A. See *Ovchinnikov, L. N. 267-050*

269-655 **Dunayev, V. F.** Ob ekonomicheskoy otsenke rezul'tatov seysmorazvedki [On th economic appraisal of the results of seismic surveying]: Neftegazovaya Geologiya Geofizika, no. 8, p. 42-45, illus., 1968.

269-393 **Duncan, R. A.** F-region seasonal and magnetic-storm behaviour: Jour. Atmo and Terrest. Physics, v. 31, no. 1, p. 59-70, illus., 1969.

Dunchenko, I. A. See *Gorin, A.Z. 268-636*

265-410 **Dungey, J. W.** Magnetohydrodynamics in the magnetosphere [with French abs. Annales Geophysique, v. 24, no. 2, p. 673-680, illus., 1968.

272-334 **Dungey, J. W.** The reconnection model of the magnetosphere, *in* Earth's part cles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Pro New York and Amsterdam, Reinhold Book Corp., p. 385-392, illus., 1968.

274-010 **Dunham, K. C.; Fitch, F. J.; Iveson, P. R.; Miller, J. A.; Mitchell, J. G.** T geochronological significance of argon-40:argon-39 age determinations on the Whi Whin from the northern Pennine orefield: Royal Soc. London Proc., Sec. A, v. 30 no. 1489, p. 251-266, illus., table, 1968.

275-121 **Dunkin, John W.** Scattering of a transient, spherical P wave by a randomly i homogeneous, elastic half-space: Geophysics, v. 34, no. 3, p. 357-382, illus., 1969.

266-445 **Dunlop, D. J.** Monodomain theory—Experimental varification: Science, v. 16 no. 3850, p. 256-258, illus., 1968.

275-403 **Dunnet, D.** A technique of finite strain analysis using elliptical particles: Te tonophysics, v. 7, no. 2, p. 117-136, illus., table, 1969.

71-196 **Dunroth, Erich.** The evolution of the central segment of the Labrador geosyncline—Part 1, Stratigraphy, facies and palaeogeography: Neues Jahrb. Geologie u. Paläontologie Abh., v. 132, no. 1, p. 22-54, illus., tables, 1968.

duPlessis, A. See *Simpson, E. S. W. 265-358*

75-278 **Duplessy, Claude; Lalou, Claude; Gomes deAzevedo, Antonio Expedito.** Étude des conditions de concrétionnement dans les grottes au moyen des isotopes stable de l'oxygène et du carbone [Study of concretion formation in caves by means of stable oxygen and carbon isotopes]: Acad. Sci. Comptes Rendus, ser. D, v. 268, no. 19, p. 2327-2330, illus., tables, 1969.

Duplessy, J. C. See *Labeyrie, J. 269-035*

Dürbaum, H. See *Behnke, C. 265-295*

65-626 **Dürbaum, H.** On the seismic velocities of the sediments of the Upper Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 55, 1967.

74-018 **Dury, G. H.; Langford-Smith, T.; McDougall, I.** A minimum age for the duricrust: Australian Jour. Sci., v. 31, no. 10, p. 362-363, tables, 1969.

74-161 **Dutta, Krishna.** On the secondary wave associated with a Rayleigh wave: Gerlands Beitr. Geophysik, v. 77, no. 6, p. 487-501, 1968.

Dutta, N. P. See *Paul, P. C. 265-624*

66-543 **Dutta, S. K.; Singh, B.** Stress measurement in mines—[Pt.] 2, Indirect methods of stress measurement: Metals and Minerals Rev., v. 7, no. 7, p. 17-34, illus., table, 1968.

74-098 **Dutta, T. K.** A note on the source parameter of the Koynanagar earthquake of 10th December 1967: Seismol. Soc. America Bull., v. 59, no. 2, p. 935-944, illus., tables, 1969.

66-121 **Dutta, Tarun Kanti.** Seismicity of Assam in relation to geotectonic processes—Nature of instability of the Assam wedge: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 63-72, illus., table, 1967.

73-052 **Duvall, George E.** Shock waves in solids, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 19-29, illus., 1968.

Duyshenaliyev, Sh. See *Grin, V. P. 269-207*

72-174 **Dvořák, Zbyněk.** The temperature dependence of electric conductivity of some basic and ultrabasic rocks of the Bohemian Massif [with Czech and Russian abs.]: Československá Akad. Véd Geofys. Sborník 1967, v. 15, p. 451-468, illus., tables, 1968.

72-175 **Dvořák, Zbyněk; Pakhomenko, E. I.** Pressure and temperature dependence of electrical conductivity of some basic and ultrabasic rocks [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 469-481, illus., tables, 1968.

Dwornik, Edward J. See *Faust, George T. 275-035*

8-103 **Dwornik, Stephen E.** A summary of Surveyor III science results, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 119-144, illus., 1968.

268-638 **Dyadkin, I. G.; Starikov, V. N.; Yenikeyeva, F. Kh.** Resheniye pryamoy zadach
NGK metodom Monte-Karlo [Solution of the direct problem of neutron gamm
logging by a Monte Carlo method]: Neftegazovaya Geologiya i Geofizika, no. 10, p
40-41, illus., 1968.

Dyad'kin, I. G. See *Gel', E. P. 272-557*

275-438 **Dyad'kin, I. G.; Starikov, V. N.; Yenikeyeva, F. Kh.** Resheniye zadach teori
neytronnogo gamma-karotazha metodom Monte-Karlo [Solution of problems of th
theory of neutron-gamma logging by a Monte Carlo method]: Akad. Nauk SSSR Izv
Fizika Zemli, no. 5, p. 94-101, illus., 1969.

Dyadyuk, N. P. See *Mizinov, N. V. 273-474*

268-203 **Dyadyura, V. A.; Starostenko, V. I.** Pro avtomatyzatsīyu hrafīchnykh pobud
pry pozv'yazku heofīzychnykh zadach na elektronnykh obchyslyuval'nyk
mashynakh [On the automation of graphical plots in solving geophysical problems o
computers (in Ukrainian with Russian and English summ.)]: Akad. Nauk Ukrayin
RSR Dopovīdī, ser. B, no. 8, p. 728-731, 1968.

271-296 **Dyadyura, V. A.; Shalayev, S. V.** Obchyslyuval'nī skhemy dlya vyznachenny
rozmīshchennya lokal'nykh heolohīchnykh ob'yektīv za hravītatsīynymy danym
[Computational schemes for determining the position of local geologic bodies fro
gravity data (with English and Russian summ.)]: Akad. Nauk Ukrayin. RS
Dopovīdī, ser. B, no. 5, p. 431-434, 1968.

275-240 **Dyadyura, V. A.** Paletki dlya interpretatsii metodom podbora osrednennykh
raznostnykh anomaliy sily tyazhesti [Master curves for trial-and-error interpretatio
of averaged and difference gravity anomalies (with English summ.)]: Akad. Nau
Ukrain. SSR Geofiz. Sbornik, no. 28, p. 5-11, illus., 1969.

D'yakonov, D. I. See *Vasil'yev, Yu. M. 269-355*

D'yakonov, G. V. See *Znamenskiy, V. V. 271-524*

Dyce, Rolf B. See *Eshleman, Von R. 266-071*

266-172 **Dychko, I. A.** O zapazdivanii zemnykh prilivov [On the lag of earth tides (wi
English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. In
Byull., Geofizika i Astronomiya, no. 11, p. 203-208, illus., tables, 1967.

269-690 **Dyer, A. J.; Hicks, B. B.** Global spread of volcanic dust from the Bali eruption
1963: Royal Meteorol. Soc. Quart. Jour., v. 94, no. 402, p. 545-554, illus., tabl
1968.

272-495 **Dyer, K. R.; Hamilton, N.; Pingree, R. D.** A seismic refraction line across t
Solent: Geol. Mag., v. 106, no. 1, p. 92-95, illus., table, 1969.

Dyson, P. L. See *Findlay, J. A. 274-314*

264-191 **Dyukov, A. I.** Sovetskaya razvedochnaya geofizika [Soviet exploratic
geophysics]: Sovetskaya Geologiya, no. 11, p. 15-29, 1967.

267-375 **Dzhafarov, S. A.** Analiz rezul'taty po opredeleniyu isotopov ugleroda v neftyak
gazakh [Analysis of results of determination of carbon isotopes in oils and gases],
Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V.
Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 109, 1967.

267-046 **Dzhafarova, R. S.** Ob absolyutnom vozraste alunitov Zaglikskogo mestoroz
deniya [On the absolute age of the alunites of the Zaglik deposit], *in* Nauchno-teor
Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'st
Akad. Nauk Azerbaydzhan. SSR, p. 10, 1967.

Dzhashi, G. G. See *Bukhnikashvili, A. V. 266-233*

266-234 **Dzhashi, G. G.** Elektrodnyye potentsialy sul'fidnykh mineralov i sootvestvuyushcheye im yestestvennoye elektricheskoye pole [The electrode potentials of sulfide minerals and the natural electrical field corresponding to them]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 182-196, illus., table, 1966.

Dzhibladze, E. A. See *Tskhakaya, A. D. 265-166*

Dziembowski, C. V. See *Giese, R. H. 275-041*

272-103 **Dziewonski, A.; Block, S.; Landisman, M.** A technique for the analysis of transient seismic signals: Seismol. Soc. America Bull., v. 59, no. 1, p. 427-444, illus., 1969.

Dziewonski, A. See *Landisman, M. 274-113*

Eade, K. E. See *Fahrig, W. F. 269-365*

264-217 **Eardley, A. J.** Major structures of the Rocky Mountains of Colorado and Utah, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 79-99, illus., 1968.

Earnshaw, R. D. S. See *Taylor, G. N. 269-394*

266-127 **Earthquake Research Institute.** (Parties for aftershock observation). Observation of aftershocks of the Niigata earthquake of June 16, 1964 [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 205-221, illus., tables, 1968.

272-117 **Earthquake Research Institute.** (Tokyo University). Anomalous land deformation in the Niigata area before the Niigata earthquake and in the Matsushiro area revealed by precise leveling: Japan Geog. Survey Inst. Bull., v. 12, pt. 2, p. 13-19, illus., 1967.

Eberhardt, E. See *Herr, W. 269-051*

Eberhardt, P. See *Eugster, O. 275-033*

271-143 **Eckel, Edwin B.** (editor). Nevada Test Site: Geol. Soc. America Mem. 110, 290 p., illus., tables, 1968.

267-207 **Ecker, E.** The effect of the atmosphere on the theory of the level ellipsoid [with German and Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 107-119, 1968.

64-286 **Eckhardt, Donald H.** Theory and interpretation of the electromagnetic impedance of the Earth: Jour. Geophys. Research, v. 73, no. 16, p. 5317-5326, illus., 1968.

Ecklund, Warner L. See *Shepherd, Donald C. 273-337*

74-258 **Eckstein, Martin C.; Shi, Yun-Yuan.** Asymptotic solutions for orbital resonances due to the general geopotential: Astron. Jour., v. 74, p. 551-562, illus., 1969.

Eckstein, Y. See *Rosenthal, E. 274-277*

Economou, Thanasis E. See *Turkevich, Anthony L. 275-076*

74-435 **Edelmann, H.** An underwater sound source with higher seismic efficiency: Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 474-490, illus., 1968.

67-583 **Edelmann, Hans.** Methoden der Erzeugung seismischer Energie auf See [Methods of generating seismic energy at sea (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 5, p. 513-529, illus., 1968.

Edgar, N. T. See *Den, N. 271-505*

270-112 **Edgerton, A. T.** Engineering applications of microwave radiometry, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 711-724, illus., table, 1968.

Edmonds, C. M. See *Wanless, R. K. 267-019*

267-092 **Edson, J. B.** "Bonus experiments" for Surveyor spacecraft, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 235-245, 1967.

Efendiyeva, M. A. See *Roze, Ye. N. 271-352*

266-078 **Egan, Walter G.; Nowatski, Edward A.** A porosity-polarization relationship applicable to the lunar surface: Astron. Jour., v. 73, no. 1, p. 57-59, illus., table, 1968.

272-078 **Egan, Walter G.; Foreman, Kenneth M.; Nowatzki, Edward A.** Interpretation and application of photometric-polarimetric observations of planetary surfaces, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 167-204, illus., table, 1968.

275-061 **Egan, Walter G.** Polarimetric and photometric simulation of the Martian surface: Icarus, v. 10, no. 2, p. 223-237, illus., 1969.

274-279 **Egerer, F.** Primechaniya k opredeleniyu fizicheskikh parametrov gornykh porod, v chastnosti ikh teploprovodimosti [Comments on the determination of the physical parameters of rocks, in particular their heat conductivity (with English summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 131-143, illus., tables, 1967.

273-331 **Egidi, A.; Pizzella, G.; Signorini, C.** Measurement of the solar wind direction with the IMP 1 satellite: Jour. Geophys. Research, v. 74, no. 11, p. 2807-2814, illus., 1969.

Egyed, László. See *Bisztricsany, Ede. 274-214*

275-191 **Egyed, László.** Physik der Festen Erde [Physics of the solid Earth]: Budapest Akad. Kiàdó, 368 p., illus., tables, 1969.

266-286 **Ehlig, Perry L.** Causes of distribution of Pelona, Rand, and Orocopia Schists along the San Andreas and Garlock faults, *in* Conference on geologic problems o San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol Sci., v. 11, p. 294-305, illus.; discussion, p. 305-306, 1968.

270-036 **Ehmann, W. D.; McKown, D. M.** Instrumental activation analysis of meteorites using gamma-gamma coincidence spectrometry: Anal. Letters, v. 2, no. 1, p. 49-60 illus., tables, 1969.

275-042 **Ehmann, William D.; Busche, Jack R.** The Walltown, Kentucky, meteorite: Ken tucky Acad. Sci. Trans., v. 29, nos. 1-4, p. 5-7, illus., table, 1968.

266-118 **Eiby, G. A.** A descriptive catalogue of New Zealand earthquakes—Pt. 1, Shocks felt before the end of 1845: New Zealand Jour. Geology and Geophysics, v. 11, no. 1 p. 16-40, illus., 1968.

267-120 **Eiby, G. A.** An annotated list of New Zealand earthquakes, 1460-1965: New Zealand Jour. Geology and Geophysics, v. 11, no. 3, p. 630-647, 1968.

Eiby, G. A. See *Adams, R. D. 270-077*

274-292 **Eiby, G. A.** Reply to R. A. Garrick's letter ["A reinterpretation of the Wellington crustal refraction profile"]: New Zealand Jour. Geology and Geophysics, v. 11, no. p. 1295, 1968.

265-006 **Eicher, Don L.** Geologic time: Englewood Cliffs, New Jersey, Prentice-Hall (Foundations of Earth Science Series), 149 p., illus., tables, 1968.

268-215 **Einarsson, Trausti.** Submarine ridges as an effect of stress fields: Jour. Geophys. Research, v. 73, no. & , p. 7561-7576, illus., 1968.

Einger, N. S. See *Kolesnik, A. P. 269-277*

272-132 **Eisler, Joseph D.** Investigation of a method for determining stress accumulation at depth, [Pt.] 2: Seismol. Soc. America Bull., v. 59, no. 1, p. 43-58, illus., tables, 1969.

274-102 **Eisler, Joseph D.** Reply [to comment by J. B. Shepherd on "Investigation of a method for determining stress accumulation at depth" (1967)]: Seismol. Soc. America Bull., v. 59, no. 2, p. 1013, 1969.

275-229 **Eisman, Donald B.** Gravity mapping proceeds—Unique effort by State: California Div. Mines and Geology Mineral Inf. Service, v. 22, no. 5, p. 82-84, illus., 1969.

Eisner, H. See *Ambach, W. 271-263*

271-023 **Ekren, E. B.; Rogers, C. L.; Anderson, R. Ernest; Orkild, P. P.** Age of basin and range normal faults in Nevada Test Site and Nellis Air Force Range, Nevada, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 247-250, illus., 1968.

Ekren, E. B. See *Armstrong, Richard L. 272-007*

268-221 **Elasser, Walter M.** The mechanics of continental drift, *in* Gondwanaland revisited—New evidence for continental drift: Am. Philos. Soc. Proc., v. 112, no. 5, p. 344-353, illus., 1968.

267-305 **Elder, J. W.** Heat and mass transfer in the Earth—Hydrothermal systems: New Zealand Dept. Sci. and Indus. Research Bull. 169, 115 p., illus., 1966.

Elders, W. A. See *Grasty, R. L. 272-023*

Eldridge, J. S. See *King, E. A., Jr. 270-023*

273-089 **ElGoresy, Ahmed L.; Fechtig, H.; Ottemann, J.** The opaque minerals in impactite glasses, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 531-553, illus., table, 1968.

El-Hakim, H. See *Sabry Youssef, M. 270-126*

Eliseyeva, G. D. See *Semenenko, N. P. 273-020*

Elísson, Gunnlaugur. See *Sigvaldason, Gudmundur E. 264-556*

266-408 **El-Kholy, Sayed B.; Selim, Ezzat T. M.** Mass spectrometric study of some selected galenas from the Eastern Desert of Egypt: Pure and Appl. Geophysics, v. 70, no. 2, p. 115-131, illus., tables, 1968.

Ellanskiy, M. M. See *Troshko, T. N. 275-445*

Elliott, D. See *Axon, H. J. 270-037*

267-310 **Ellis, R. M.; Basham, P. W.** Crustal characteristics from short-period P waves: Seismol. Soc. America Bull., v. 58, no. 5, p. 1681-1700, illus., tables, 1968.

Ellis, R. M. See *Basham, P. W. 274-078*

266-428 **ElMohandis, M. G. S.** Magnetohydrodynamic disturbances in the Earth's core, [Pt.] 1: Pure and Appl. Geophysics, v. 70, no. 2, p. 132-148, 1968.

275-320 **ElMohandis, M. G. S.** Magnetohydrodynamic disturbances in the Earth's core, [Pt.] 4: Pure and Appl. Geophysics, v. 74, p. 45-56, 1969.

268-543 **Elorduy Téllez, Ernesto.** Método Duyel para migración continua, con tendidos y distribución de velocidades del subsuelo, variables [Duyel method for continuous migration with variable spreads and velocity function in the subsoil]: Asoc. Mexicana Geofísicos Explor. Bol., v. 7, no. 4, p. 223-244, illus., 1966.

El-Shalzli, M. See *Shata, A. 267-026*

268-528 **ElShazly, E. M.; Shukri, N. M.; Fouad, K. M.; Ammar, A. A.; Meleik, M. L.** Airborne radiometry and regional geology in the Central Eastern Desert, Egypt, U.A.R., *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 37-48, illus., tables, 1968.

271-555 **Elskens, I.; Tazieff, Haroun; Tonani, F.** Investigations nouvelles sur les gaz volcaniques [New investigations on volcanic gases]: Bull. Volcanol., v. 32, no. 3, p. 523-575, illus., tables, 1969.

267-252 **Elston, Wolfgang E.; Coney, Peter J.; Rhodes, Rodney C.** A progress report on the Mogollon Plateau volcanic province, southwestern New Mexico, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 261-287, illus., 1968.

273-072 **Elston, Wolfgang E.; Lambert, Paul Wayne; Smith, Eugene I.** Striated cones—wind-abrasion features, not shatter cones, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 287-290, illus., 1968.

268-396 **Embleton, B. J. J.** Laboratory stability tests applied to Devonian lavas from Scotland: Royal Astron. Soc. Geophys. Jour., v. 16, no. 3, p. 239-251, illus., tables, 1968.

274-359 **Embleton, B. J. J.** Evidence of rapid polar shift from the palaeomagnetic record of Eurasia: Nature, v. 222, no. 5198, p. 1036-1037, illus., 1969.

265-461 **Emeleus, T. G.; Osborne, D. G.** Magnetic measurements on Kilimanjaro [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 715-718, illus., tables, 1968.

Emerson, D. W. See *Phipps, C. V. G. 269-624*

270-125 **Emerson, D. W.; Whiteley, R. J.; Henderson, R. J.** A field test of the unipole method of resistivity profiling: Australian Jour. Sci., v. 31, no. 4, p. 156-158, illus., 1968.

Emerson, D. W. See *Henderson, R. J. 273-173*

264-543 **Emery, K. O.** The Atlantic continental margin of the United States during the past 70 million years [with French abs.], *in* Collected papers on geology of the Atlantic region—Hugh Lilly Memorial Volume: Geol. Assoc. Canada Spec. Paper 4, p. 53-70, illus., 1967.

Emery, K. O. See *Uchupi, Elazar. 266-509*

Emery, K. O. See *Milliman, John D. 269-004*

269-606 **Emery, K. O.** Shallow structure of continental shelves and slopes: Southeastern Geology, v. 9, no. 4, p. 173-194, illus., 1968.

269-676 **Emery, K. O.; Ross, David A.** Topography and sediments of a small area of the continental slope south of Martha's Vineyard: Deep-Sea Research, v. 15, no. 4, p. 415-422, illus., table, 1968.

Emery, K. O. See *Sanders, J. E. 271-544*

264-419 **Emilia, David A.; Berg, Joseph W., Jr.; Bales, William E.** Magnetic anomalies off the northwest coast of the United States: Geol. Soc. America Bull., v. 79, no. 8, p. 1053-1062, illus., 1968.

Emiliani, C. See *Rona, E. 268-003*

274-240 **Emmons, R. C.** Strike-slip rupture patterns in sand models: Tectonophysics, v. 7, no. 1, p. 71-87, illus., 1969.

Emoree, P. See *Hileman, J. A. 274-433*

265-233 **Endo, Gensuke; Hori, Masao; Murata, Katsuyuki.** On the induced polarization properties of ore and rocks [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 6, p. 246-254, illus., tables, 1967.

266-220 **Enenshteyn, B. S.** Besparametricheskiy metod opredeleniya glubiny zaleganiya krovli kristallicheskogo fundamenta po krivym chastotnykh zondirovaniy [A parameter-less method of determining the depth to the top of the crystalline basement from frequency sounding curves]: Akad. Nauk SSSR Doklady, v. 181, no. 2, p. 339-342, illus., tables, 1968.

Enenshteyn, B. S. See *Nikitina, V. N. 271-141*

Enescu, D. See *Constantinescu, Liviu. 265-364*

Enescu, D. See *Cornea, I. 268-548*

Engdahl, E. R. See *Taggart, James. 265-106*

267-095 **Engdahl, Eric R.; Taggart, James; Lobdell, John L.; Arnold, E. P.; Clawson, Gerald E.** Computational methods: Seismol. Soc. America Bull., v. 58, no. 4, p. 1339-1344, illus., 1968.

269-359 **Engdahl, Eric R.; Flinn, Edward A.** Seismic waves reflected from discontinuities within Earth's upper mantle: Science, v. 163, no. 3863, p. 177-179, illus., 1969.

275-261 **Engdahl, Eric R.; Flinn, Edward A.** Remarks on the paper "Early reflections of P′P′ as an indication of upper mantle structure," by R. D. Adams: Seismol. Soc. America Bull., v. 59, no. 3, p. 1415-1417, illus., 1969.

264-002 **Engel, Albert E. J.; Nagy, Bartholomew; Nagy, Lois Anne; Engel, Celeste G.; Kremp, Gerhard O.; Drew, Charles M.** Alga-like forms in Onverwacht Series, South Africa—Oldest recognized lifelike forms on Earth: Science, v. 161, no. 3845, p. 1005-1008, illus., 1968.

Engel, Celeste G. See *Fisher, Robert L. 271-184*

Engel, Celeste G. See *Fisher, Robert L. 275-408*

Engel, René. See *Vali, V. 266-257*

272-058 **Engelhardt, W. von; Bertsch, W.** Shock induced planar deformation structures in quartz from Ries crater, Germany: Contr. Mineralogy and Petrology, v. 20, no. 3, p. 203-234, illus., tables, 1969.

273-064 **Engelhardt, W. von; Stöffler, D.** Stages of shock metamorphism in crystalline rocks of the Ries basin, Germany, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 159-168, illus., tables, 1968.

273-084 **Engelhardt, W. von; Hörz, F.; Stoffler, D.; Bertsch, W.** Observations on quartz deformation in the breccias of West Clearwater Lake, Canada, and the Ries basin, Germany, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 475-482, illus., table, 1968.

Engels, J. C. See *Tabor, R. W. 264-003*

Engels, Joan C. See *Yates, Robert G. 269-010*

Engen, Gladys R. See *Brune, James N. 274-097*

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267-007 **Epis, Rudy C.; Chapin, Charles E.** Geologic history of the Thirtynine Mile volcanic field, central Colorado, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 51-85, illus., 1968.

Epis, Rudy C. See *Steven, Thomas A. 267-010*

Epstein, S. See *Hoefs, J. 275-276*

275-094 **Ergin, Kazim.** Observed intensity-epicentral distance relations in earthquakes: Seismol. Soc. America Bull., v. 59, no. 3, p. 1227-1238, illus., tables, 1969.

Ergin, M. See *Baxter, M. S. 271-006*

Erickson, Barrett H. See *Grim, Paul J. 271-377*

275-345 **Erickson, Barrett H.; Grim, Paul J.** Profiles of magnetic anomalies south Aleutian Island Arc: Geol. Soc. America Bull., v. 80, no. 7, p. 1387-1389, illus., 1969.

269-087 **Erickson, James E.** Mass influx and penetration rate of meteor streams: Jour. Geophys. Research, v. 74, no. 2, p. 576-585, illus., tables, 1969.

274-042 **Erickson, James E.** Analysis of meteoroid flux measured by Explorer 16 and Lunar Orbiter: Astron. Jour., v. 74, no. 2, p. 279-283, illus., table, 1969.

Erickson, Ralph L. See *Mudge, Melville R. 267-249*

268-002 **Ericson, David B.; Wollin, Goesta.** Pleistocene climates and chronology in deep-sea sediments: Science, v. 162, no. 3859, p. 1227-1234, illus., table, 1968.

266-216 **Erkel, Andras; Király, Erno; Nemesi, László.** A geoelektromos módszerek éredményei Kunszentmárton körnéyken [Results of geoelectric methods in the Kunszentmarton region (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 3, p. 99-104, illus., 1968.

Erlank, A. J. See *Ahrens, L. H. 267-055*

Erlank, A. J. See *VonMichaelis, H. 272-049*

Erlenkeuser, H. See *Willkomm, H. 265-015*

268-241 **Erlich, E. N.** Recent movements and Quaternary volcanic activity within the Kamchatka Territory: Pacific Geology, v. 1, p. 23-39, illus., table, 1968.

271-215 **Erlikh, E. N.** Chertvertichnyy vulkanizm i sovremennaya struktura podvizhnykh poyasov zapadnoy chasti Tikhookeanicheskogo kol'tsa problemy sootnosheniya [Quaternary volcanism and present structure of the mobile belts of the western part of the Pacific Ocean rim, problems of correlation (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 193-199, illus., 1968.

Erpert, A. M. See *Arsh, E. I. 269-250*

Ersoy, Uğur. See *Uzsoy, Safak Z. 274-085*

269-327 **Erwin, John W.** Gravity map of Tonopah, Baxter Spring, Lone Mountain and San Antonio Ranch quadrangles, Nevada: Nevada Bur. Mines Map 36, scale 1:125,000, text, 1968.

Esca, Al. See *Ciocardel, R. 265-302*

Escalante, G. See *Krushensky, R. D. 266-552*

Esenov, E. M. See *Vakhtanova, A. N. 264-152*

266-071 **Eshleman, Von R.; Fjeldbo, Gunnar; Anderson, John D.; Kliore, Arvydas; Dyce, Rolf B.** Venus—Lower atmosphere not measured: Science, v. 162, no. 3854, p. 661-665, illus., table, 1968.

Eshleman, Von R. See *Fjeldbo, Gunnar. 269-117*

265-123 **Espinosa, A. F.** Observed travel times fr multiply-reflected ScS waves from a deep-focus earthquake: Annali Geofisica, v. 19, no. 4, p. 415-425, illus., table, 1966.

Espinosa, A. F. See *Sato, R. 265-185*

Estrin, Yu. Ya. See *Eygeles, R. M. 268-594*

Eto, Tsuneo. See *Kaminuma, Katsutada. 275-111*

275-033 **Eugster, O.; Eberhardt, P.; Geiss, J.** Isotopic analyses of krypton and xenon in fourteen stone meteorites: Jour. Geophys. Research, v. 74, no. 15, p. 3874-3896, illus., tables, 1969.

275-034 **Eugster, O.; Tera, F.; Wasserburg, G. J.** Isotopic analyses of barium in meteorites and in terrestrial samples: Jour. Geophys. Research, v. 74, no. 15, p. 3897-3908, illus., tables, 1969.

272-513 **Eurenius, J.; Fagerstrom, H.** Sampling and testing of soft rock with weak layers: Geotechnique, v. 19, no. 1, p. 133-139, illus., table, 1969.

274-462 **Evans, Bernard.** The nickel partition geothermometer applied to the prehistoric Makaopuhi Lava Lake, Hawaii: Geochim. et Cosmochim. Acta, v. 33, no. 3, p. 409-411, table, 1969.

Evans, Clifford. See *Friedman, Irving. 272-001*

274-058 **Evans, John V.** Radar surveys of the solar system, *in* The planet Venus—Past, present, and future—Symposium commemorating the Society's participation in observations of a Transit of Venus, June 3, 1769, Philadelphia, 1968: Am. Philos. Soc. Proc., v. 113, no. 3, p. 203-223, illus., tables, 1969.

Evans, M. E. See *McElhinny, M. W. 272-355*

Evans, Roger J. See *Colbeck, S. C. 274-251*

Evans, S. See *Bailey, J. T. 271-128*

Eventov, Ya. S. See *Alekseyeva, V. I. 270-511*

Everett, J. E. See *Osemeikhian, J. E. A. 266-426*

Everingham, I. B. See *Doyle, H. A. 274-124*

275-086 **Evernden, J. F.** Identification of earthquakes and explosions by use of teleseismic data: Jour. Geophys. Research, v. 74, no. 15, p. 3828-3856, illus., tables, 1969.

275-099 **Evernden, Jack F.** Precision of epicenters obtained by small numbers of world-wide stations: Seismol. Soc. America Bull., v. 59, no. 3, p. 1365-1398, illus., tables, 1969.

267-376 **Eviatar, Aharon; Wolf, R. A.** Transfer processes in the magnetopause: Jour. Geophys. Research, v. 73, no. 17, p. 5561-5576, illus., 1968.

Eviatar, Aharon. See *Schulz, Michael. 272-300*

271-009 **Evin, J.; Longin, R.; Pachiaudi, Ch.** Lyon natural radiocarbon measurements I: Radiocarbon, v. 11, no. 1, p. 112-117, 1969.

265-352 **Evison, F. F.** Active regions of the southwest Pacific, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1045-1049, illus., 1968.

268-138 **Evison, F. F.** Earthquake wave anomalies in New Zealand: New Zealand Dept. Sci. Indus. Research Seismol. Observatory Bull., S139, p. 19-24, illus., tables, 1966.

268-139 **Evison, F. F.** The polymorphic transition as a possible earthquake source: New Zealand Dept. Sci. Indus. Research Seismol. Observatory Bull., S141, p. 173-179, 1967.

Evison, F. F. See *Hamilton, R. M. 274-126*

264-314 **Ewart, A.; Stipp, J. J.** Petrogenesis of the volcanic rocks of the central North Island, New Zealand, as indicated by a study of Sr-87:Sr-86 ratios and Sr, Rb, K, U and Th abundances: Geochim. et Cosmochim. Acta, v. 32, no. 7, p. 699-736, illus., tables, 1968.

270-100 **Ewen, H. I.; Haneman, F.; Kalafus, R. M.; Louapre, M. E.; Mailloux, R.; Steinbrecher, D. H.** Microwave radiometric capabilities and techniques, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 9-58, illus., 1968.

268-211 **Ewing, John; Ewing, Maurice; Aitken, Thomas; Ludwig, William J.** North Pacific sediment layers measured by seismic profiling, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 147-173, illus., 1968.

Ewing, John I. See *Drake, Charles L. 265-348*

Ewing, John I. See *Ludwig, William J. 269-675*

Ewing, John I. See *Den, N. 271-506*

Ewing, John I. See *Ewing, Maurice. 274-416*

275-415 **Ewing, John I.** History of the ocean basins as recorded in the sediments, *in* Selected papers from the Governor's Conference on Oceanography, New York, 1967: [Albany, N. Y., State Dept. Commerce?] p. 144-155, illus. [1968].

Ewing, Maurice. See *Worzel, J. Lamar. 266-510*

Ewing, Maurice. See *Ewing, John. 268-211*

Ewing, Maurice. See *Nowroozi, A. A. 269-213*

Ewing, Maurice. See *Ludwig, William J. 269-675*

274-416 **Ewing, Maurice; Houtz, R. E.; Ewing, John I.** South Pacific sediment distribution: Jour. Geophys. Research, v. 74, no. 10, p. 2477-2493, illus., 1969.

Ewing, Maurice. See *Sheridan, R. E. 274-417*

Ewing, Maurice. See *Latham, G. 275-054*

275-414 **Ewing, Maurice; Worzel, J. Lamar.** Geophysical oceanographic studies at Lamont Geological Observatory, *in* Selected papers from the Governor's Conference on Oceanography, New York, 1967: [Albany, N. Y., State Dept. Commerce?] p. 8-35, illus. [1968].

Eydman, I. Ye. See *Sherman, G. Kh. 275-443*

268-594 **Eygeles, R. M.; Estrin, Yu. Ya.** Nekotoryye voprosy izucheniya mekhanicheskikh svoystv gornykh porod pri vysokikh temperaturakh i davleniyakh primenitel'no k bureniyu glubokikh i sverkhglubokikh skvazhin [Some problems of studying the mechanical properties of rocks at high temperatures and pressures applicable to the drilling of deep and ultradeep boreholes], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 94-97, 1968.

Ezdrin, M. B. See *Kolesnik, A. P. 269-277*

272-491 **Faas, Richard W.** An empirical relationship between reflection coefficients and ocean bottom sediments, *in* National symposium on ocean sciences and engineering of the Atlantic Shelf, Philadelphia, 1968, Trans.: Washington, D. C., Marine Technology Soc., p. 149-167, illus., tables, 1968.

272-086 **Fabian, P.; Libby, W. F.** Ozone in the atmosphere of Venus: Zeitschr. Geophysik, v. 35, no. 1, p. 1-7, illus., tables, 1969.

Fabre, J. See *Boissonnas, J. 272-022*

Fabries, J. See *Boissonnas, J. 272-022*

267-444 **Facer, R. A.** Some results of a reconnaissance magnetic investigation of Ordovician rocks from central western New South Wales: Australian Jour. Sci., v. 31, no. 3, p. 120-121, illus., 1968.

Fagerström, H. See *Eurenius, J. 272-513*

Fahey, Joseph. See *Faust, George T. 275-035*

265-394 **Fahr, H. J.** Charge-transfer interactions between solar wind protons and neutral particles in the vicinity of the Sun: Nature, v. 219, no. 5153, p. 473-474, illus., 1968.

269-365 **Fahrig, W. F.; Eade, K. E.** The chemical evolution of the Canadian Shield: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1247-1252, illus., tables, 1968.

Fahrig, W. F. See *Murthy, G. S. 269-431*

72-493 **Fain, Gilbert; Middleton, F. H.; Haas, Robert S.** A continuous seismic profiling display system: Ocean Eng., v. 1, no. 1, p. 3-7, illus., 1968.

Fairbairn, H. W. See *Hurley, P. M. 273-015*

73-025 **Fairbairn, H. W.; Faure, G.; Pinson, W. H., Jr.; Hurley, P. M.** Rb-Sr whole-rock age of the Sudbury lopolith and basin sediments, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 707-714, illus., tables, 1968.

68-238 **Fairbridge, Rhodes W.; Newman, Walter S.** Postglacial crustal subsidence of the New York area [with German and French abs.]: Zeitschr. Geomorphologie, v. 12, no. 3, p. 296-317, illus., tables, 1968.

66-420 **Fairfield, D. H.** Simultaneous measurements on three satellites and the observation of the geomagnetic tail at 1000 R_E: Jour. Geophys. Research, v. 73, no. 19, p. 6179-6187, illus., 1968.

68-368 **Fairfield, D. H.** Average magnetic field configuration of the outer magnetosphere: Jour. Geophys. Research, v. 73, no. 23, p. 7329-7338, illus., 1968.

74-312 **Fairfield, D. H.** Bow shock associated waves observed in the far upstream interplanetary medium: Jour. Geophys. Research, v. 74, no. 14, p. 3541-3553, illus., table, 1969.

Fairhall, A. W. See *Schell, W. R. 269-030*

270-072 **Fairhead, J. D.; Girdler, R. W.** How far does the rift system extend through Africa?: Nature, v. 221, no. 5185, p. 1018-1020, illus., 1969.

275-236 **Fajklewica, Zbigniew; Cianciara, Bogdan.** Aproksymowanie rozkladu siły cieżkości nad niektorymi strukturami geologicznymi metodą diagramow logarytmicznych [Approximation of the distribution of gravity over some geological structures by the method of logarithmic master curves (with English text and Russian summ.)]: Polska Akad. Nauk Kom. Nauk Geol. Prace Geol. 54, 48 p., illus., 1969.

Faller, J. E. See *Bender, P. L. 264-201*

Falls, Darrell F. See *Morgan, W. Jason. 271-186*

267-291 **Fanelli, M.; Lavenia, A.** Considerations on the radial heat flow from a therma line source [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 120-133, illus., tables, 1968.

Fanselau, G. See *Best, A. 272-328*

265-227 **Fanselau, Gerhard; Treumann, Rudolf.** Untersuchungen zur Interpretation de Ergebnisse geomagnetischer Tiefensondierungen [Investigations on the interpretation of the results of geomagnetic depth sounding (with English and Russia summ.)]: Geologie, v. 17, no. 1, p. 76-92, illus., 1968.

273-322 **Fanselau, Gerhard.** Geomagnetische Aspekte des Upper Mantle Projec [Geomagnetic aspects of the Upper Mantle Project]: Geologie, v. 17, no. 3, p. 324-335, 1968.

274-324 **Fanselau, Gerhard.** Zur harmonische Analyse des SQ [On the harmonic analysi of Sq (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 1, p. 27-40, illus table, 1969.

267-188 **Faradzhev, A. S.; Mamedov, R. A.** Nekotoryye rezul'taty statsionarnykh nablyudeniy zemnykh tokov v Shemakhe [Some results of steady observations of earth currents at Shemakha], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Se Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 64-6 1967.

268-193 **Farah, Abul.** Geophysics on trial in East Pakistan: Pakistan Geol. Surve Geonews, v. 1, no. 1, p. 18-22, illus., 1968.

Farberov, A. I. See *Balesta, S. T. 270-448*

275-402 **Farmer, I. W.** Engineering properties of rocks: London, E. and F. N. Spon Ltd 180 p., illus., tables, 1968.

264-542 **Farquhar, O. C.** Enigma on the sea floor: Nat. History, v. 77, no. 3, p. 54-57, illus., 1968.

Farquhar, R. M. See *Hamilton, E. I. 267-011*

271-360 **Farrell, W. E.; May, B. T.** Paleomagnetism of Permian redbeds from th Colorado Plateau: Jour. Geophys. Research, v. 74, no. 6, p. 1495-1504, illus., table 1969.

275-095 **Farrell, W. E.** A gyroscopic seismometer—Measurements during the Borreg earthquake: Seismol. Soc. America Bull., v. 59, no. 3, p. 1239-1245, illus., 1969.

Fastovskiy, U. V. See *Kozlov, A. N. 270-291*

Fatkullin, M. N. See *Zagulyayeva, V. A. 264-357*

Fatkullin, M. N. See *Krutikova, T. I. 267-423*

267-198 **Fattakhutdinov, G. A.** Razvedka pogrebennykh struktur Bashkirskoy chasti Tatarskogo svoda [Surveying buried structures of the Bashkir part of the Tatar arch]: Geologiya Nefti i Gaza, no. 7, p. 20-23, illus., 1968.

Faul, H. See *Naeser, C. W. 269-002*

Faul, H. See *Lyons, J. B. 273-006*

269-003 **Faure, G.; Chaudhuri, S.; Fenton, M. D.** Ages of the Duluth gabbro complex and of the Endion sill, Duluth, Minnesota: Jour. Geophys. Research, v. 74, no. 2, p. 720-725, illus., tables, 1969.

Faure, G. See *Fairbairn, H. W. 273-025*

Faure, G. See *Fenton, M. D. 275-005*

Faure, Gunter. See *Chaudhuri, Sambhudas. 268-005*

Faure, Gunter. See *Goldberg, Edward D. 270-249*

273-010 **Faure, Gunter; Murtaugh, J. G.; Montigny, R. J. E.** The geology and geochronology of the basement complex of the central Transantarctic Mountains, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 555-560, illus., table, 1968.

275-035 **Faust, George T.; Fahey, Joseph; Mason, Brian; Dwornik, Edward J.** Pecoraite, $Ni_6Si_4O_{10}(OH)_8$, nickel analog of clinochrysotile, formed in the Wolf Creek meteorite: Science, v. 165, no. 3888, p. 59-60, illus., table, 1969.

Favini, Giancarlo. See *Meyer de Stadelhofen, Camille. 274-180*

Favorskaya, M. A. See *Baskina, V. A. 272-036*

273-185 **Faynberg, E. B.; Lagutinskaya, L. P.** Some characteristics of MTS curves with allowance for the sphericity of the Earth: Geomagnetism and Aeronomy, v. 8, no. 5, p. 790-791, illus., 1968.

Faynberg, E. B. See *Dubrovskiy, V. G. 273-186*

Faynberg, F. S. See *Metallova, V. V. 267-448*

Fayngersh, L. A. See *Guseva, A. N. 267-374*

64-038 **Fechtig, H.; Gerloff, U.; Weihrauch, J. H.** Results of cosmic-dust collection on Luster 1965: Jour. Geophys. Research, v. 73, no. 1, p. 5029-5037, illus., table, 1968.

Fechtig, H. See *ElGoresy, Ahmed L. 273-089*

Fedchishin, A. S. See *Vakul'skiy, A. A. 274-198*

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Fedoriv, R. F. See *Bragin, A. A. 270-170*

Fedorov, A. A. See *Baranov, G. M. 275-353*

Fedorov, A. N. See *Osipov, N. K. 264-354*

70-528 **Fedorov, A. S.** Radiotelemetricheskiy kanal svyazi dlya peredachi parametrov bureniya s zaboya burovoy skvazhiny [Radiotelemetric connecting channel for transmitting drilling parameters from the bottom of the hole]: Geofiz. Apparatura, no. 36, p. 140-146, illus., 1968.

Fedorov, L. V. See *Lopatin, B. G. 264-411*

Fedorov, S. A. See *Starovoyt, O. E. 267-321*

Fedorov, V. V. See *Blankov, Ye. B. 272-563*

266-221 **Fedorova, D. P.; Blokhin, P. A.** O glubinnom stroyenii yugo-zapadnoy chasti Russkoy platformy i Preddobrudzhskoy vpadiny po dannym elektrorazvedki [On the deep structure of the southwestern part of the Russian platform and the near-Dobrudja basin according to electrical survey data]: Razved. Geofizika, no. 25, p. 39-46, illus., 1968.

267-173 **Fedorova, D. P.; Averbukh, A. G.** Rezul'taty primeneniya kompleksa elektrorazvedki metodom ZS i seysmorazvedki KMPV pri izuchenii zony sochleneniya raznovozrastnykh fundamentov [Results of using a combination of electrical survey by the field buildup method and seismic refraction surveying in studying a zone of junction of basements of different age]: Razved. Geofizika, no. 26, p. 41-50, illus., 1968.

Fedorova, N. A. See *Yun'kov, A. A. 264-272*

264-139 **Fedotov, S. A.; Tokarev, P. I.; Bobkov, M. F.; Kuzin, I. P.** Zemletryaseniya Kamchatki i Komandorskikh ostrovov po dannym detal'nykh seysmologicheskikh nablyudeniy [Earthquakes in Kamchatkaand the Commander Islands according to the data of detailed seismological observations], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 166-184, illus., tables, 1967.

Fedotov, S. A. See *Tokarev, P. I. 265-175*

268-312 **Fedotov, S. A.** On deep structure, properties of the upper mantle, and volcanism of the Kuril-Kamchatka Island arc according to seismic data, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 131-139, illus., 1968.

271-099 **Fedotov, S. A.** Dolgosrochnyy seysmicheskiy prognoz dlya Kurilo-Kamchatskoy zony [Long-term seismic prediction for the Kurile-Kamchatka zone], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 121-132, illus., table, 1968.

273-132 **Fedotov, S. A.** O seysmichnosti oblasti ochaga katastroficheskogo Iturupskogo zemletryaseniya 6 XI 1958 g. i seysmicheskom prognoze [On the seismicity of the focal region of the catastrophic Iturup earthquake of November 6, 1958 and seismic prediction]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 3-12, illus., 1969.

Fedotov, V. M. See *Berkman, R. Ya. 270-287*

268-202 **Fedynskiy, V. V.** Some problems involving both the Earth sciences and space sciences, *in* The Earth and the Universe: Springfield, Virginia, Federal Clearinghouse Sci. and Tech. Inf., p. 113-121, 1968; translated from Russian, *in* Zemlya vo vselennoy: Moscow, Izdatel'stvo "MYSL," 1964.

269-284 **Fedynskiy, V. V.; Litvinenko, O. K.; Ushakov, S. A.; Vashchilov, J. J.; Volodarskiy, R. F.** Application of mathematical methods for the interpretation of the results of regional geophysical investigations, *in* Internat. Geol. Cong., 23d, Prague, 1968 Proc., Sec. 13, Other subjects: Prague, Academia, p. 181-188, illus., 1968.

Fedynskiy, V. V. See *Vashchilov, Yu. Ya. 273-221*

Feissel, Martine. See *Guinot, Bernard. 266-308*

Feitham, William. See *Gedney, Larry. 275-102*

Fel'dman, S. L. See *Levin, L. E. 267-200*

-402 **Fel'dshteyn, Ya. I.; Shevnin, A. D.; Starkhov, G. V.** Auroral oval and magnetic field in the tail of the magnetosphere [with Russian and French abs.]: Annales Géophysique, v. 24, no. 2, p. 517-519, illus., 1968.

-406 **Fel'dshteyn, Ya. I.; Zaytsev, A. N.** S -variation of the magnetic field in high latitudes with different intensity of magnetic disturbances [with French and Russian abs.]: Annales Geophysique, v. 24, no. 2, p. 595-602, illus., table, 1968.

Fel'dshteyn, Ya. I. See *Starkov, G. V. 274-335*

Fel'dshteyn, Ya. I. See *Zaytsev, A. N. 274-344*

-312 **Feldstein, Y. I.** Polar auroras, polar substorms, and their relationships with the dynamics of the magnetosphere, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 179-218, illus., 1969.

-115 **Feliziani, P.; Marcelli, L.** Il terremoto di Tolmezzo del 26 Aprile 1959—I parte, Venti secoli di storia sismica della Regione Carnica e dell'Italia Nord-Orientale [The Tolmezzo earthquake of April 26, 1959—Pt. 1, Twenty centuries of seismic history of the Carnic region and northeastern Italy (with English summ.)]: Annali Geofisica, v. 18, no. 3, p. 165-207, illus., table, 1965.

-121 **Feliziani, P.; Marcelli, L.** I terremoto di Tolmezzo del 26 Aprile 1959—II parte, Studio macrosismico-geologico; determinazione analitica delle grandezze ipocentrali e nature della scossa [The Tolmezzo earthquake of April 26, 1959—Pt. 2, Macroseismic and geologic study; determination of the hypocentral magnitude and nature of the shock (with English summ.)]: Annali Geofisica, v. 19, no. 2, p. 191-214, illus., tables, 1966.

Fellers, G. E. See *Hawkes, I. 272-510*

Fenton, M. D. See *Faure, G. 269-003*

-005 **Fenton, M. D.; Faure, G.** The age of the igneous rocks of the Stillwater Complex of Montana: Geol. Soc. America Bull., v. 80, no. 8, p. 1599-1604, illus., tables, 1969.

Fergus, John H., Jr. See *Simpson, Dale R. 268-575*

-168 **Fernández Alonso, F.** Investigacion hidrogeológica en la provincia de Almería [Hydrogeologic investigation in the province of Almería]: Rev. Geofísica, v. 26, nos. 101-102, p. 21-34, illus., 1967.

-169 **Fernández Alonso, F.** Método de puesta a masa—Aplicación en la zona pirítica de la provincia de Huelva [The "mise à la masse" method—Application in the pyrite zone of the province of Huelva]: Rev. Geofísica, v. 26, no. 101-102, p. 35-44, illus., 1967.

Fernando, C. H. See *Ball, Ian R. 270-180*

Fernando, P. C. B. See *Kannangara, M. L. T. 269-390*

-179 **Ferrão, C. A. C. Neves.** Utilização dos métodos geofísicos na prospecção de aguas subterrâneas em regiões áridas e semi-áridas [Utilization of geophysical methods in prospecting for ground water in arid and semi-arid regions (with French and English abs.)]: Angola Serviços Geologia e Minas Bol. 13, 1966, p. 5-12, illus., 1967.

Ferrara, G. See *Borsi, S. 266-035*

-360 **Ferrara, G.; Gonfiantini, R.; Pistoia, P.** Isotopic composition of argon from steam jets of Tuscany, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 267-275, table [1967].

Ferrara, G. See *Ferrara, G. C. 267-361*

Ferrara, G. See *Boissonnas, J. 272-022*

267-361 **Ferrara, G. C.; Ferrara, G.; Gonfiantini, R.** Carbon isotopic composition of ca
bon dioxide and methane from steam jets of Tuscany, *in* Nuclear geology on geothe
mal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geolog
Nucleare, p. 277-284, illus., table [1967].

Ferrara, Giorgio. See *Bass, Manuel N. 272-008*

Ferrara, Giorgio. See *Borsi, Sergio. 275-020*

272-315 **Ferraro, V. C. A.** The solar-terrestrial environment—An historical survey: Plan
tary and Space Sci., v. 17, no. 3, p. 295-311, 1969.

268-255 **Ferrero, G. M.** Moto ondoso in un canale glaciale [Undulatory motion in a g
cial canal (with English abs.)]: Com. Glaciol. Italiano Boll., ser. 2, no. 12, pt. 1, p. 1
22, 1966.

265-599 **Ferronskiy, V. I.; Danilin, A. I.; Dubinchuk, V. T.; Goncharov, V. S.; Polyak
V. A.; Seletskiy, Yu. B.; Flekser, N. Ya.** Radioizotopnyye metody issledovaniya v i
henernoy geologii i gidrogeologii [Radioisotopic methods of investigation in e
gineering geology and hydrogeology]: Moscow, Atomizdat, 304 p., illus., tab
1968.

Ferronskiy, V. I. See *Alekseyev, F. A. 271-500*

Ferronskiy, V. I. See *Alekseyev, F. A. 272-481*

264-056 **Fesenkov, V. G.** Meteority—Svideteli rozhdeniya solnechnoy siste
[Meteorites—Witnesses of the birth of the solar system]: Priroda, no. 5, p. 2-13,
lus., 1968.

Feygin, Ye. B. See *Dashkenich, N. N. 269-340*

Feygin, Ye. B. See *Kozyrev, V. D. 275-173*

Feygin, Ye. B. See *Savinskiy, K. A. 275-176*

268-235 **Feyling-Hanssen, Rolf W.** Shoreline displacement in central Spitsbergen, *in*
gebnisse der Stauferland-Expedition 1959/60, V. 3—Vorträge des Fridtjof-Nans
Gedächtnis-Symposions über Spitzbergen, Würzburg, Germany 1961: Wiesbad
Germany, Franz Steiner Verlag GMBH, p. 24-28, illus., 1965.

268-237 **Fevling-Hanssen, Rolf W.** Problème du "Soulèvement des terres autour d
Mer de Barentz" [discussion of paper by J. Corbel, 1960], *in* Ergebnisse der Stau
land-Expedition 1959/60, V. 3—Vorträge des Fridtjof-Nansen-Gedächt
Symposions über Spitzbergen, Würzburg, Germany 1961: Wiesbaden, Germa
Franz Steiner Verlag GMBH, p. 68-72, illus., 1965.

Fidler, Richard E. See *Norris, Stanley E. 272-525*

266-120 **Fiedler, Guenther E.** Some notes on earthquake faults, magnitude and st
energy: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 47-61, illus.
bles, 1967.

Field, William O. See *Tuthill, Samuel J. 270-063*

271-051 **Field, William O.** The effect of previous earthquakes on glaciers, *in* The g
Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 2
265, illus., table, 1968.

Fielder, G. See *Guest, J. E. 265-095*

68-053 **Fielder, G.; Guest, J. E.** Size-frequency distributions of particles and lunar surface materials: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 86-88, illus., table, 1968.

68-063 **Fielder, G.; Guest, J. E.** Explosion craters on the Earth and Moon: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 115, p. 111-123, illus., 1968.

70-396 **Filanovskiy, I. M.** Aktivnyye fil'try v kanale registratsii seysmicheskikh signalov [Active filters in the channel of recording seismic signals]: Geofiz. Apparatura, no. 36, p. 118-125, illus., 1968.

70-284 **Filatov, A. I.; Stoykiy, V. M.; Stepanov, A. P.** Vysokochuvstvitel'nyy yadernyy geomagnitometr [Highly sensitive nuclear geomagnetometer]: Geofiz. Apparatura, no. 35, p. 16-26, illus., table, 1968.

64-435 **Filatov, V. A.** O yedinstvennosti resheniya obratnoy zadachi v metode iskusstvennogo podmagnichivaniya [On the uniqueness of the solution of the inverse problem in the method of artificial magnetic biasing]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 111-117, 1968.

67-193 **Filatov, V. A.** O chislennom reshenii obratnoy zadachi v metode iskusstvennogo podmagnichivaniya [On the numerical solution of the inverse problem in the method of artificial magnetic biasing]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 92-98, illus., 1968.

73-396 **Filatov, V. A.** Raschet magnitnogo polya ot dvukhmernogo tela proizvol'nogo secheniya [Calculation of the magnetic field from a two-dimensional body of arbitrary cross-section]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 82-91, illus., 1969.

Filin, A. S. See *Gavrilov, Ye. Ya. 267-365*

Filippov, Ye. M. See *Vakhtin, B. S. 265-601*

75-454 **Filippov, Ye. M.** Ob isklyuchenii vliyaniya vlazhnosti gornykh porod na rezul'taty izmereniy neytronnymi geofizicheskimi metodami [On eliminating the effect of moisture content of rocks from the results of measurements by neutron geophysical methods (with English summ.)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 115-121, illus., 1969.

74-069 **Fillias, A. J.** Formation de craters gravitiques [Formation of gravity craters]: Ciel et Terre, v. 84, nos. 5-6, p. 165-166, illus., 1968.

57-413 **Fillius, R. Walker.** Penetration of solar protons to four earth radii in the equatorial plane [with French abs.]: Annales Geophysique, v. 24, no. 3, p. 821-840, illus., tables, 1968.

75-352 **Filonov, V. A.** K voprosu ob ispol'zovanii radioaktivnosti podzemnykh vod v kachestve kosvennogo gidrokhimicheskogo pokazatelya neftenosnosti [On the problem of the use of radioactivity of ground waters an an indirect hydrochemical criterion of oil-bearing capability]: Neftegazovaya Geologiya i Geofizika, no. 3, p. 32-35, illus., table, 1969.

75-243 **Fil'shtinskiy, L. Ye.** Ob uchete vliyaniya peremennoy plotnosti promezhutochnogo sloya [On taking into account the effect of variable density of the intermediate layer (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 46-52, illus., 1969.

74-314 **Findlay, J. A.; Dyson, P. L.; Brace, L. H.; Zmuda, A. J.; Radford, W. E.** Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967: Jour. Geophys. Research, v. 74, no. 14, p. 3705-3712, illus., 1969.

Finetti, I. See *Ceccherini, P. T. 271-280*

Finger, D. L. See *Ivanov, M. M. 268-444*

Finger, D. L. See *Abramova, L. M. 271-356*

Finger, D. L. See *Abramov, Yu. M. 273-371*

268-614 **Finlayson, J. Bruce; Barnes, I. Lynus; Naughton, John J.** Developments in vol canic gas research in Hawaii, *in* The crust and upper mantle of the Pacific area—In ternat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 1 (NAS-NRC Pub. 1687), p. 428-438, illus., tables, 1968.

Finzi-Contini, G. See *Norinelli, A. 267-256*

271-126 **Finzi-Contini, G.** On induced polarization—Non-linear phenomena [with Italia summ.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 290-298, illus., tables, 1968.

270-132 **Fircks, Christoph von.** Erforschung des oberen Erdmantels mit magneto-tellu rischen Methoden (Internationaler Stand und Ergebnisse aus der DDR) [Researc on the upper mantle by magnetotelluric methods (International state and resul from the German Democratic Republic)]: Freiberger Forschungshefte, C 233, p. 7 29, illus., table, 1968.

266-047 **Fireman, E. L.; DeFelice, J.** Rare gases in phases of the Deelfontein meteorite Jour. Geophys. Research, v. 73, no. 18, p. 6111-6116, tables, 1968.

273-108 **Firsoff, V. A.** The interior planets: Edinburgh and London, Oliver and Boyd, 12 p., illus., tables, 1968.

275-080 **Firsoff, V. A.** Exploring the planets (2d edition): Cranbury, New Jersey, A. Barnes and Co., 183 p., illus., tables, 1968.

266-058 **Firsov, L. F.** O meteoritnom proiskhozhdenii Puchezh-Katunkskogo kratera [O the meteoritic origin of the Puchezh-Katunk crater]: Geotektonika, no. 2, p. 10 118, illus., tables, 1965.

Fischer, F. See *Noakes, John E. 265-017*

271-168 **Fischer, Irene; Slutsky, Mary; Shirley, F. R.; Wyatt, P. Y., 3d.** New pieces in th picture puzzle of an astrogeodetic geoid map of the world: Bull. Geod., no. 88, 199-221, illus., tables, 1968.

265-373 **Fischer, Wolfgang; Maass, Ingeborg; Sontag, Erika; Suss, Manfred.** C-12:C-1 Untersuchungen an petrologisch, chemisch, und technisch charakterisierten Brau kohleproben [C-12:C-13 investigations on petrologically, chemically, and technolo ically described lignite samples (with English and Russian summ.)]: Zeitschr. Ange Geologie, v. 14, no. 4, p. 182-187, illus., tables, 1968.

269-104 **Fisher, D. E.** Cosmic radiation ages and space erosion—[Pt.] 2, The ir meteorites, *in* Radioactive dating and methods of low-level counting—IAEA-ICS Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Age cy, p. 269-280, illus., tables, 1967.

272-059 **Fisher, D. E.; Currie, R. L.** Instrumental activation analysis of meteorites invol ing both thermal and fast nneutrons [wtih French, Russian, and Spanish abs.], Radiochemical methods of analysis—Internat. Atomic Energy Agency Symposiu Salzburg, 1964, Proc., V. 1: Vienna, Austria, Internat. Atomic Energy Agency, 217-228, illus., tables, discussion, 1965.

Fisher, D. E. See *Loveland, W. 274-033*

Fisher, D. L. See *Cross, C. A. 270-053*

Fisher, David E. See *Rancitelli, Louis A. 264-041*

266-048 **Fisher, David E.; Swanson, Mary F.** Frequency distribution of meteorite-Earth collisions: Jour. Geophys. Research, v. 73, no. 20, p. 6503-6513, illus., tables, 1968.

Fisher, David E. See *Funkhouser, John G. 268-006*

269-015 **Fisher, David E.** Fission-track ages of deep-sea glasses: Nature, v. 221, no. 5180, p. 549-550, table, 1969.

273-048 **Fisher, David E.** Silicon in iron meteorites and the Earth's core: Nature, v. 222, no. 5196, p. 866-867, 1969.

Fisher, David E. See *Luyendyk, Bruce P. 274-002*

274-039 **Fisher, David E.** Uranium content of some stone meteorites and their Pu-Xe decay interval: Nature, v. 222, no. 5199, p. 1156, table, 1969.

275-260 **Fisher, David E.; Joensuu, O.; Boström, Kurt.** Elemental abundances in ultramafic rock and their relation to the upper mantle: Jour. Geophys. Research, v. 74, no. 15, p. 3865-3873, illus., tables, 1969.

273-493 **Fisher, John J.** Preliminary quantitative analysis of surface morphology of inner continental shelf, Cape Henry, Virginia, to Cape Fear, North Carolina, *in* National symposium on ocean sciences and engineering of the Atlantic Shelf, Philadelphia, 1968, Trans.: Washington, D.C., Marine Technology Soc., p. 143-148, illus., 1968.

Fisher, R. G. See *Benseman, R. F. 267-298*

271-184 **Fisher, Robert L.; Engel, Celeste G.; Hilde, Thomas W. C.** Basalts dredged from the Amirante Ridge, western Indian Ocean: Deep-Sea Research, v. 15, no. 5, p. 521-534, illus., tables, 1968.

275-408 **Fisher, Robert L.; Engel, Celeste G.** Ultramafic and basaltic rocks dredged from the nearshore flank of the Tonga Trench: Geol. Soc. America Bull., v. 80, no. 7, p. 1373-1378, illus., table, 1969.

Fisher, Wilson, Jr. See *Stingelin, Ronald W. 267-159*

264-552 **Fiske, R. S.; Koyanagi, R. Y.** The December 1965 eruption of Kilauea Volcano, Hawaii: U.S. Geol. Survey Prof. Paper 607, 21 p., illus., tables, 1968.

Fiske, Richard. See *Moore, James G. 275-420*

Fitch, F. J. See *Dunham, K. C. 274-010*

Fitch, F. J. See *Bishop, W. W. 275-001*

274-083 **Fitch, Thomas J.** Microearthquake activity following the Parkfield, California, earthquake of June, 1966: Seismol. Soc. America Bull., v. 59, no. 2, p. 603-613, illus., 1969.

Fjeldbo, Gunnar. See *Eshleman, Von R. 266-071*

269-117 **Fjeldbo, Gunnar; Eshleman, Von R.** The atmosphere of Mars analyzed by integral inversion of the Mariner IV occultation data: Planetary and Earth Sci., v. 16, no. 8, p. 1035-1059, illus., 1968.

265-224 **Flathe, H.** The determination of the electrical resistivity of the crust within the region of the Rhinegraben, *in* The Rhinegraben progress report 1967: Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 96-97, illus., 1967.

273-174 **Flathe, Herbert.** Geoelektrische Untersuchung der Grundwasserversalzung im südlichen Jordantal [Geoelectric investigation of ground water salinity in the southern Jordan valley (with English and French summ.)]: Geol. Jahrb., v. 85, p. 767-782, illus., 1968.

Fleet, M. See *Darnley, A. G. 270-341*

265-004 **Fleischer, R. L.; Viertl, J. R. M.; Price, P. B.; Aumento, F.** Mid-Atlantic Ridge—Age and spreading rates: Science, v. 161, no. 3848, p. 1339-1342, illus., table, 1968.

265-080 **Fleischer, R. L.** Uranium distribution in stone meteorites by the fission track technique: Geochim. et Cosmochim. Acta, v. 32, no. 9, p. 989-998, illus., tables, 1968.

273-005 **Fleischer, R. L.; Price, P. B.; Walker, R. M.** Nuclear tracks in solids: Sci. American, v. 220, no. 6, p. 30-39, illus., 1969.

273-007 **Fleischer, R. L.; Viertl, J. R. M.; Price, P. B.** Age of the Manicouagan and Clearwater Lakes craters: Geochim. et Cosmochim. Acta, v. 33, no. 4, p. 523-527, illus., tables, 1969.

267-018 **Fleischer, Robert L.; Price, P. Buford; Walker, Robert M.** Charged particle tracks: tools for geochronology and meteorite studies, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 417-436, illus., tables, 1968.

Flekser, N. Ya. See *Ferronskiy, V. I. 265-599*

Flekser, N. Ya. See *Alekseyev, F. A. 272-481*

Fleming, S. J. See *Aitken, M. J. 265-041*

Fleming, S. J. See *Aitken, M. J. 266-020*

266-025 **Fleming, S. J.** Thermoluminescent age studies on mineral inclusions separated from ancient pottery, Chap. 7.8 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 431-439, illus., tables, 1968.

Fleming, S. J. See *Aitken, M. J. 269-054*

274-133 **Flick, J.; Melchior, Paul.** Résultats des observations de marées terrestres dans les trois composantes au Grand-Duché de Luxembourg [Results of earth tide observations in the three components in the Grand Duchy of Luxembourg]: Acad. Royale Belgique Bull. Cl. Sci., ser. 5, v. 54, no. 10, p. 1214-1221, illus., tables, 1968.

Flinn, E. A. See *Wuenschel, P. C. 274-217*

Flinn, Edward A. See *Engdahl, Eric R. 269-359*

Flinn, Edward A. See *Engdahl, Eric R. 275-261*

Florenskiy, K. P. See *Ivanov, A. V. 267-067*

267-068 **Florenskiy, K. P.; Ivanov, A. V.; Il'in, N. P.; Petrikova, M. N.; Loseva, L. Ye.** Khimicheskiy sostav kosmicheskikh sharikov iz rayona Tungusskoy katastrofy nekotoryye voprosy differentsiatsii veshchestva kosmicheskikh tel [Chemical composition of cosmic spherules from the region of the Tunguska catastrophe and some problems of the differentiation of matter of cosmic bodies (with English summ.)] Geokhimiya, no. 10, p. 1163-1173, illus., tables, 1968.

267-069 **Florenskiy, K. P.; Ivanov, A. V.; Kirova, O. A.; Zaslavskaya, N. I.** Fazovyy sostav melkodispersnogo vnezemnogo veshchestva iz rayona Tungusskoy katastrofy [Phase composition of finely dispersed extraterrestrial matter from the region of the Tunguska catastrophe (with English summ.)]: Geokhimiya, no. 10, p. 1174-1182, illus., table, 1968.

Florenskiy, P. V. See *Markov, M. S. 269-151*

271-212 **Florensov, N. A.; Solonenko, V. P.; Logachev, N. A.** Kaynozoyskiy vulkanizm riftovykh zon [Cenozoic volcanism of rift zones (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 146-151, illus., 1968.

Florkowski, T. See *Davis, G. H. 264-317*

Florkowski, T. See *Williams, P. H. 269-064*

Folinsbee, R. E. See *Shafiqullah, M. 267-029*

268-213 **Folinsbee, R. E.; Baadsgaard, H.; Cumming, G. L.; Green, D. C.** A very ancient island arc, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 441-448, illus., tables, 1968.

Folinsbee, R. E. See *Shafiqullah, M. 269-071*

274-037 **Folinsbee, R. E.; Bayrock, L. A.; Cumming, G. L.; Smith, D. G. W.** Vilna meteorite—Camera, visual, seismic and analytic records: Royal Astron. Soc. Canada Jour., v. 63, no. 2, p. 61-86, illus., tables, 1969.

270-503 **Fölsz, Attila; Réz, Ferenc.** Számítógépes munkák az OGIL Kútgeofizikai Osztályán [Computer work at the Geophysical Logging Division of the OGIL (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 139-146, illus., 1968.

Fomenko, K. Ye. See *Znamenskiy, V. V. 271-524*

Fomichev, A. G. See *Lebedinskiy, A. I. 268-098*

272-289 **Fomichev, V. I.; Zamyatin, N. I.** Izotopnyy sostav sery i etapnost' orudeneniya v Sayakskom rayone (s. Pribalkhash'ye) [Isotopic composition of sulfur and the stage nature of the mineralization in the Sayak region (northern Balkhash area)]: Geokhimiya, no. 7, p. 860-864, table, 1968.

Fomina, N. A. See *Babich, V. M. 266-200*

Fonarev, G. A. See *Shneyer, V. S. 269-468*

270-496 **Fons, Lloyd.** Acoustic logging through casing, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. J1-J10, illus., 1968.

274-491 **Fons, Lloyd, Sr.** Geological applications of well logs, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. AA1-AA44, illus., table, 1969.

270-041 **Fontaine, Henri.** Découverte de tectites sans formes figurées dans la province de Bien-Hoa [Discovery of tektites without representative form in Bien-Hoa Province]: Viêt-Nam Archives Géol., no. 9, p. 3-4, illus., 1966.

Foote, Leonard J. See *Meighan, Clement W. 272-002*

270-342 **Foote, R. S.** Application of airborne gamma-radiation measurements to pedologic mapping, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 855-875, illus., 1968.

268-062 **Forbes, F. F.; Welch, P. A.** The infrared polarization of the Moon: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 114, p. 105-110, illus., 1968.

270-435 **Forbes, Robert B.; Dugdale, R. C.; Katsura, T.; Matsumoto, H.; Haramura, H.** Dredged basalt from Giacomini Seamount: Nature, v. 221, no. 5183, p. 849-850, illus., table, 1969.

Foreman, Kenneth M. See *Egan, Walter G. 272-078*

266-558 **Forjaz, V. H.; Weston, F. S.** Volcanic activity in the Azores—Report for 1959-1964: Bull. Volcanol., v. 31, p. 261-266, illus., table, 1968.

Formisano, V. See *Siscoe, G. L. 264-321*

Formont, René. See *Daly, Lucien. 272-362*

264-310 **Fornaca-Rinaldi, G.; Panichi, C.; Tongiorgi, E.** Some causes of the variation in the isotopic composition of carbon and oxygen in cave concretions: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 321-324, illus., table, 1968.

267-024 **Fornaca-Rinaldi, G.** Il metodo Th-230:U-238 per la datazione di stalattiti e stalagmiti [The Th-230:U-238 method for dating stalactites and stalagmites (with English abs.)]: Boll. GeofisicaTeor. ed Appl., v. 10, no. 37, p. 3-14, illus., tables, 1968.

268-007 **Fornaca-Rinaldi, G.** Th-230/Th-234 dating of cave concretions: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 120-122, tables, 1968.

Forova, V. S. See *Cherdyntsev, V. V. 265-023*

Forova, V. S. See *Cherdyntsev, V. V. 265-024*

Forova, V. S. See *Cherdyntsev, V. V. 267-036*

Forova, V. S. See *Kind, N. V. 272-038*

Forsenkova, I. V. See *Cherdyntsev, V. V. 267-036*

273-286 **Förtsch, Otto; Vidal, H.** Seismo-glaziologische Untersuchungen im oberen Fischbachtal [Seismoglaciologic investigations in the upper Fischbach Valley (with English summ.)]: Zeitschr. Gletscherkunde u. Glazialgeologie, v. 5, no. 2, p. 61-68, illus., table, 1968.

Foster, John H. See *Smith, John D. 269-422*

268-536 **Foster, M. R.; Sengbush, R. L.; Watson, R. J.** Use of Monte Carlo techniques in optimum design of the deconvolution process: Geophysics, v. 33, no. 6, p. 945-949, illus., tables, 1968.

269-289 **Foster, Theodore D.** Convection in a variable viscosity fluid heated from within: Jour. Geophys. Research, v. 74, no. 2, p. 685-693, illus., tables, 1969.

Fotiadi, E. E. See *Gaynanov, A. G. 268-315*

273-222 **Fotiadi, E. E.; Karatayev, G. I.** Mnogopriznakovyy geotektonicheskiy analiz regional'nykh geofizicheskikh dannykh metodami diskretnoy matematiki [Multicriterion geotectonic analysis of regional geophysical data by the methods of discrete mathematics (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 22-29, table, 1967.

275-237 **Fotiadi, E. E.; Karatayev, G. I.** Opyt analiza metodom diskretnoy matematiki dannykh regional'nykh geofizicheskikh issledovaniy dlya geotektonicheskogo rayonirovaniya i ustanovleniya tipov zemnoy kory [Attempt to analyze data of regional geophysical investigations by the method of discrete mathematics for geotectonic regionalization and establishing the type of Earth's crust]: Akad. Nauk SSSR Doklady, v. 183, no. 5, p. 1159-1162, illus., 1968.

Fouad, K. M. See *ElShazly, E. M. 268-528*

264-079 **Foukal, Peter.** A possible observational correlation of lunar luminescence with the K_p index: Icarus, v. 9, no. 1, p. 162-174, illus., 1968.

275-143 **Fountain, David K.** Geophysics applied to the exploration and development of copper and molybdenum deposits in British Columbia: Canadian Mining and Metall. Bull., v. 61, no. 678, p. 1199-1206, illus., 1960; Canadian Inst. Mining and Metallurgy Trans. 1968, v. 71, p. 308-315, illus., 1968.

267-224 **Fourmarier, P.** Le problème de la dérive des continents [The problem of continental drift]: Acad. Royale Belgique Mém. Cl. Sci., ser. 2, v. 17, pt. 2, 318 p., illus., 1967.

270-190 **Fourmarier, P.** Arcs antillais et bassin canadien [Antilles arcs and Canadian basin]: Acad. Royale Sci. Outre-Mer Bull. Séances 1968-2, p. 392-415, illus., 1968.

271-132 **Fournier, H. G.; Fournier, H. J.** Étude des frequences de la résonance de Schumann par procédé magnétotellurique en temps réel [Study of frequencies of the Schumann resonance by magnetotelluric procedure in actual time]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géophysique, v. 12, no. 2, p. 71-76, illus., 1968.

Fournier, H. J. See *Fournier, H. G. 271-132*

269-687 **Fournier, Robert O.** Old Faithful—A physical model: Science, v. 163, no. 3864, p. 304-305, 1969.

268-116 **Fowler, R. A.** Earthquake prediction from laser surveying—A report, NASA SP-5042: Washington, D. C., Natl. Aeronautics and Space Adm., 32 p., illus., tables, 1968.

267-604 **Fox, P. J.; Heezen, Bruce C.; Harian, A. M.** Abyssal anti-dunes: Nature, v. 220, no. 5166, p. 470-472, illus., 1968.

273-486 **Fox, Paul J.; Lowrie, Allen, Jr.; Heezen, Bruce C.** Oceanographer Fracture Zone: Deep-Sea Research, v. 16, no. 1, p. 59-66, illus., 1969.

275-199 **Fox, Paul J.; Pitman, W. C.; 3d; Shepard, Frank.** Crustal plates in the central Atlantic—Evidence for at least two poles of rotation: Science, v. 165, no. 3892, p. 487-489, illus., 1969.

275-202 **Fox, Paul J.** (editor). Annotated bibliography on the world rift system—The Mid-Oceanic Ridge (Upper Mantle Project Sci. Rept. 14): Palisades, N Y., World Data Center A, Upper Mantle Project, Lamont Geol. Observatory, 80 p., 1967.

271-510 **Fraga Purata, Jorge A.** Los métodos sismológicos en la exploración petrolera [Seismic methods in petroleum exploration]: Geología y Metalurgía, v. 3, no. 24, p. 5-53, illus., tables, 1968.

268-423 **Francheteau, Jean; Sclater, J. G.; Richards, M. L.; Harrison, C. G. A.** Comments on paper by G. R. Schimke and C. G. Bufe, "Geophysical description of a Pacific Ocean seamount" [1968]: Jour. Geophys. Research, v. 73, no. 24, p. 7713-7715, illus., 1968.

266-029 **Francis, E. H.; Smart, J. G. O.; Snelling, N. J.** Potassium-argon age determination of an East Midlands alkaline dolerite: Yorkshire Geol. Soc. Proc., v. 36, pt. 3, p. 293-296, illus., 1968.

267-112 **Francis, T. J. G.** Seismicity of mid-ocean ridges and its relation to properties of the upper mantle and crust: Nature, v. 220, no. 5170, p. 899-901, illus., 1968.

268-327 **Francis, T. J. G.** Generation of seismic anisotropy in the upper mantle along the mid-oceanic ridges: Nature, v. 221, no. 5176, p. 162-165, illus., table, 1969.

275-309 **Frandsen, Allan M. A.; Holzer, Robert E.; Smith, Edward J.** OGO search coil magnetometer experiments: IEEE Trans. Geosci. Electronics, v. GE-7, no. 2, p. 61-74, illus., 1969.

267-219 **Frank, F. C.** Two-component flow model for convection in the Earth's upper mantle: Nature, v. 220, no. 5165, p. 350-352, 1968.

267-220 **Frank, F. C.** Curvature of island arcs: Nature, v. 220, no. 5165, p. 363, 1968.

Franklin, Joel N. See *Smith, Martin L. 274-216*

Frantov, G. S. See *Bulgakov, Yu. I. 267-176*

Frantsuzova, V. I. See *Levshin, A. L. 266-199*

Frantsuzova, V. I. See *Levshin, A. L. 273-150*

268-083 **Franzgrote, E. J.; Patterson, J. H.; Turkevich, A. L.** Chemical analysis of the Moon at the Surveyor VII landing site—Preliminary results, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 241-266, illus., 1968.

Franzgrote, Ernest J. See *Turkevich, Anthony L. 265-094*

Franzgrote, Ernest J. See *Turkevich, Anthony L. 270-048*

Franzgrote, Ernest J. See *Turkevich, Anthony L. 275-055*

Franzgrote, Ernest J. See *Turkevich, Anthony L. 275-076*

273-340 **Fraser-Smith, A. C.** A possible full-Moon enhancement of hydromagnetic emission activity: Jour. Geophys. Research, v. 74, no. 11, p. 2987-2995, illus., tables, 1969.

Frazier, G. A. See *Keightley, W. O. 268-114*

Freda, G. N. See *Pearce, G. W. 272-357*

Freden, S. C. See *Paulikas, G. A. 265-384*

264-316 **Fredrichsen, Hans.** Sauerstoffisotopen einiger Minerale der Karbonatite des Fengebietes, Süd Norwegen [Oxygen isotopes of some minerals from the carbonatites of the Fen area, South Norway (with English abs.)]: Lithos, v. 1, no. 1, p. 70-75, table, 1968.

269-396 **Fredricks, R. W.; Kennel, C. F.; Scarf, F. L.; Crook, G. M.; Green, I. M.** Detection of electric-field turbulence in the Earth's bow shock: Phys. Rev. Letters, v. 21, no. 26, p. 1761-1764, illus., 1968.

274-057 **Freeberg, Jacquelyn H.** Terrestrial impact structures—A bibliography, 1965-68: U.S. Geol. Survey Bull. 1320, 39 p., 1969.

Freedman, Helen W. See *Tucker, William. 265-103*

265-104 **Freedman, Helen W.** Seismological measurements and measurement error: Seismol. Soc. America Bull., v. 58, no. 4, p. 1261-1271, 1968.

Freeman, J. W. See *Schield, M. A. 268-380*

Freeman, J. W., Jr. See *Kavanagh, L. D., Jr. 265-378*

265-382 **Freeman, J. W., Jr.; Warren, C. S.; Maguire, J. J.** Plasma flow directions at the magnetopause on January 13 and 14, 1967: Jour. Geophys. Research, v. 73, no. 17, p. 5719-5731, illus., tables, 1968.

270-259 **Freeman, John W., Jr.** Magnetospheric wind: Science, v. 163, no. 3871, p. 1061-1062, illus., 1969.

Freeman, Margaret C. See *Park, Charles F., Jr. 271-148*

Frejaville, G. See *Ravoire, J. 269-060*

271-211 **Fremd, G. M.** Osobennosti razvitiya postorogennogo tektono-magmaticheskogo protsessa [Features of development of the post-orogenic tectonomagmatic process (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 123-124, 1968.

266-024 **Fremlin, J. H.** Effects of non-uniformity of material on the thermoluminescent method of dating, Chap. 7.6 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 419-425, illus., 1968.

273-050 **French, Bevan M.; Short, Nicholas M.** (editors): Shock metamorphism of natural materials, 1st Conf., Goddard Space Flight Center, Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., 644 p., illus., tables, 1968.

273-051 **French, Bevan M.** Shock metamorphism as a geological process, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 1-17, illus., 1968.

273-080 **French, Bevan M.** Sudbury structure, Ontario—Some petrographic evidence for an origin by meteorite impact, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 383-412, illus., 1968.

Frenklikh, M. S. See *Kuznetsov, Yu. V. 267-366*

267-217 **Freund, Raphael; Zak, Israel; Garfunkel, Zwi.** Age and rate of the sinistral movement along the Dead Sea Rift: Nature, v. 220, no. 5164, p. 253-255, illus., 1968.

266-378 **Frey, Fred A.; Haskin, Mary A.; Poetz, Jo Ann; Haskin, Larry A.** Rare earth abundances in some basic rocks: Jour. Geophys. Research, v. 73, no. 18, p. 6085-6098, illus., tables, 1968.

Fridman, Sh. D. See *Balyasnyy, N. D. 270-345*

Friedel, R. A. See *Retcofsky, H. L. 266-447*

Friedman, I. See *Lovering, T. S. 275-295*

Friedman, Irving. See *Lovering, T. S. 266-415*

272-001 **Friedman, Irving; Evans, Clifford.** Obsidian dating revisited: Science, v. 162, no. 3855, p. 813-814, i1968.

Friedman, Irving. See *Barker, Fred. 275-270*

Friedman, Irving. See *Murata, K. J. 275-272*

270-117 **Friedman, Jules D.** Infrared sensing of active geologic processes, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 787-815, illus., tables, 1968.

267-216 **Frisch, Bruce.** The case of the drifting continents: Petroleum Today, v. 9, no. 4, p. 30i33, illus., 1968.

273-177 **Fritsch, Volker; Tauber, A. F.** Geoelektrische Untersuchungen von Salzwasservorkommen [Geoelectrical investigations of salt water occurrences (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 2, p. 161-173, illus., 1969.

274-181 **Fritsch, Volker; Tauber, Alfons F.** Der spezifische Widerstand von Tonen und Ton-Sand-Gemengen [The specific resistivity of clays and clay-sand mixtures (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 1, p. 57-72, illus., tables, 1969.

265-611 **Fritz, Axel M.** Engineering geophysics—Its use and abuse, *in* Highway geology symposium, 17th Ann., Iowa State Univ., 1966, Proc.: Iowa State Univ. Dept. Earth Sci. Pub. 1, p. 84-91, 1968.

267-289 **Fritz, P.** Osservazioni idrologiche sulle acque di Montecatini Terme [Hydrological observations of the springs of Montecatini Terme (with English abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 15-27, illus., tables, 1968.

270-159 **Froelich, A. J.; Krieg, E. A.; Hopkins, R. M.** Recent geophysical results, northern Amadeus basin: APEA Jour., v. 8, pt. 2, p. 104-113, illus., 1968.

274-173 **Fröhlich, R. K.** The influence of lateral inhomogeneities on the dipole methods: Geophys. Prosp. [Netherlands], v. 16, no. 3, p. 314-325, illus., 1968.

264-329 **Frölich, F.; Vollstaedt, H.; Kirsten, G.** To the problem of exploration of the space-time-structure of the main geomagnetic field: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 147-154, illus., 1968.

266-470 **Frölich, F.** Studies on reaction kinetics in magnetic oxide minerals: Pure and Appl. Geophysics, v. 70, no. 2, p. 110-114, 1968.

Frölich, Friedrich. See *Vollstadt, Heiner. 268-408*

268-413 **Frölich, Friedrich; Mecke, Klaus.** Zur Thermodynamik magnetischer Minerale [On the thermodynamics of magnetic minerals (with English abs.)]: Gerlands Beitr. Geophysik, v. 77, no. 4, p. 314-320, illus., 1968.

274-363 **Frölich, Friedrich; Völlstadt, Heiner; Kirsten, Günter.** Untersuchungen zu umkehrungserscheinungen des geomagnetischen Hauptfeldes [Investigations on the phenomena of reversal of the geomagnetic main field (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 173-179, illus., table, 1969.

Frolov, A. D. See *Zaborovskiy, A. I. 267-183*

Frolov, A. D. See *Zaborovskiy, A. I. 273-196*

Frolov, A. I. See *Stroyev, P. A. 264-270*

Frolov, A. I. See *Grushinskiy, N. P. 265-332*

Frolov, A. I. See *Stroyev, P. A. 275-248*

Frolov, P. M. See *Katterfeld, G. N. 269-166*

Frolova, A. V. See *Gal'perin, Ye. I. 269-640*

Frolova, L. A. See *Doroginitskaya, L. M. 264-525*

269-657 **Frolovich, G. M.; Yurchuk, I. M.; Tiunov, P. G.** Novyye dannyye o geologicheskom stroyenii i neftegazonosnosti dodevonskikh otlozheniy zapadnykh rayonov Permskoy oblasti [New data on the geology and oil and gas possibilities of the pre-Devonian formations of the western regions of the Perm Region]: Neftegazovaya Geologiya i Geofizika, no. 9, p. 11-14, illus., 1968.

264-578 **Froymovich, B. N.** Vibroustoychivost' zerkal'nykh gal'vanometrov-vstavok karotazhnogo ostsillografa [Vibration resistance of the mirror galvanometer mountings of a logging oscillograph]: Prikladnaya Geofizika, no. 51, p. 187-199, illus., tables, 1968.

268-637 **Froymovich, B. N.** Zerkal'nyy logometr-vstavka dlya karotazhnogo ostsillografa [Specular logometer-insert for a logging oscillograph]: Prikladnaya Geofizika, no. 53, p. 192-205, illus., 1968.

266-570 **Frydecki, Janusz.** Oznaczenia w geofizyce wiertniczej [Determinations in borehole geophysics (with English and Russian abs.)]: Przegląd Geol., v. 16, no.(184), p. 391-394, table, 1968.

270-509 **Frydecki, Janusz.** Kompleks metod geofizyki wiertniczej stosowanych w ZSRR dla celow naftowych [Complex of drilling geophysical methods applied in the U.S.S.R. for petroleum purposes (with English and Russian abs.)]: Przegląd Geol., v. 16, no. 12 (188), p. 572-574, 1968.

264-074 **Fryer, R. J.** Crater alignments in the Flamsteed region of the Moon: Planetary and Space Sci., v. 16, no. 6, p. 809-814, illus., 1968.

Fuchs, K. See *Mueller, St. 265-362*

266-190 **Fuchs, K.** Das Reflexions- und Transmissionsvermögen eines geschichteten Mediums mit beliebiger Tiefen-Verteilung der elastischen Moduln und der Dichte für schrägen Einfall ebener Wellen [The reflection and transmission possibilities of a layered medium with arbitrary depth distribution of the elastic moduli and density for oblique incidence of plane waves (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 4, p. 389-413, illus., table, 1968.

273-321 **Fuchs, Karl.** On the properties of deep crustal reflectors: Zeitschr. Geophysik, v. 35, no. 2, p. 133-149, illus., 1969.

Fuchs, Louis. See *Olsen, Edward. 264-043*

270-025 **Fuchs, Louis H.** X-ray crystallographic evidence for the meteoritic occurrence of nepheline: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 187-190, table, 1969.

Fudali, Robert. See *Dietz, Robert S. 275-036*

Fujii, Naoyuki. See *Kanamori, Hiroo. 265-333*

Fujii, S. See *Torao, M. 266-305*

269-627 **Fujinaga, Yasuhiko; Kumano, Tetsuya.** Some examples of computer application to analysis and computation in geophysical prospecting [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 2, p. 83-91, illus., tables, 1968.

271-314 **Fujisawa, Hideyuki.** Temperature and electrical conductivity in the upper mantle [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 927-955, illus., tables, 1968.

275-335 **Fujiwara, Yoshiki.** Changing of the paleolatitude in the Japanese Islands through the Palaeozoic and Mesozoic: Hokkaido Univ. Fac. Sci. Jour. ser. 4 (Geology and Mineralogy), v. 14, no. 2, p. 159-168, illus., tables, 1968.

Fujiyama, Chikako. See *Yamasaki, Fumio. 265-016*

Fukunishi, H. See *Nagata, T. 264-336*

273-357 **Fukunishi, Hiroshi; Hirasawa, Takeo.** Ionospheric effect on geomagnetic micropulsations at low latitudes: Rept. Ionosphere and Space Research Japan, v. 22, no. 4, p. 235-248, illus., table, 1968.

265-405 **Fukushima, Naoshi; Nagata, Takesi.** Morphology of magnetic disturbance [with French abs.]: Annales Géophysique, v. 24, no. 2, p. 583-593, illus., 1968.

Fukushima, Naoshi. See *Iijima, Takesi. 270-266*

Fullagar, P. D. See *Dietrich, R. V. 269-007*

Fullagar, Paul D. See *Bottino, Michael L. 267-001*

269-068 **Fullagar, Paul D.; Bottino, Michael L.** Geochronology of Silurian and Devonian age volcanic rocks from northeastern North America, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 17-32, illus., tables, 1968.

Fuller, M. See *Kobayashi, Kazuo. 266-460*

Fuller, M. See *Lowrie, W. 274-357*

264-020 **Fulton, R. J.** Olympia interglaciation, Purcell Trench, British Columbia: Geol. Soc. America Bull., v. 79, no. 8, p. 1075-1080, illus., tables, 1968.

268-006 **Funkhouser, John G.; Fisher, David E.; Bonatti, Enrico.** Excess argon in deep-sea rocks: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 95-100, illus., table, 1968.

266-291 **Funnell, B. M.; Smith, A. Gilbert.** Opening of the Atlantic Ocean: Nature, v. 219, no. 5161, p. 1328-1333, illus., tables, 1968.

Funnell, B. M. See *Jones, E. J. W. 271-509*

269-203 **Fursov, V. A.; Vol'fson, N. B.; Khivalovskiy, A. G.** Rezul'taty izucheniya parov rtuti v zone Tashkentskogo zemletryaseniya [Results of a study of mercury vapors in the zone of the Tashkent earthquake]: Akad. Nauk SSSR Doklady, v. 179, no. 5, p. 1213-1215, illus., 1968.

265-047 **Furukawa, Hiroyasu; Mitsushio, Hiromi.** C-14 age of the Quaternary deposits in Japan—[Pt.] 41, C-14 age of the peat bed beneath the New Sand Dune deposit in the western end of Genkai Dune [in Japanese]: Earth Sci. (Chikyu Kagaku), v. 22, no. 3 (96), p. 177-178, illus., 1968.

Furukawa, M. See *Hamaguchi, H. 273-045*

Furumoto, A. S. See *Yuen, P. C. 272-092*

268-310 **Furumoto, Augustine S.; Woollard, George P.; Campbell, J. F.; Hussong, D. M.** Variation in the thickness of the crust in the Hawaiian archipelago, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 94-111, illus., tables, 1968.

268-535 **Furumoto, Augustine S.; Adams, William Mansfield.** Seismic refraction study of the internal structure of a volcanic cinder cone, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 112-121, illus., 1968.

275-037 **Fuse, Kiyono; Anders, Edward.** Aluminum-26 in meteorites—[Pt.] 6, Achondrites: Geochim. et Cosmochim. Acta, v. 33, no. 6, p. 653-670, illus., tables, 1969.

274-289 **Fyfe, W. S.** Experiment and the crust of the Earth: Royal Soc. London Proc., Sec. A, v. 307, no. 1491, p. 373-389, illus., 1968.

273-250 **Fyson, W. K.** Profile variation in a kink set, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 243-254, illus.; discussion, p. 361, 1969.

Gabay, N. L. See *Orlov, I. V. 269-085*

275-453 **Gabriyelyan, G. V.** Rezul'taty seysmokarotazha v Oktemberyanskom i Priyerevanskom rayonakh Armyanskoy SSR [Results of seismic logging in the Oktemberyan and Yerevan regions of the Armenian S.S.R.]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, nos. 3-4, p. 54-62, illus., 1965.

Gaca, J. R. See *Peterson, D. L. 267-251*

Gadayev, A. Ya. See *Shavlo, S. G. 274-281*

265-648 **Gadzhiyev, S. O.** Tektonika yuzhnoy chasti Zaunguzskikh Karakumov po dannym seysmorazvedki [Structure of the southern part of the Zaunguz Kara Kums according to seismic survey data]: Neftegazovaya Geologiya i Geofizika, no. 5, p. 29-32, illus., 1968.

Gafarov, R. A. See *Kropotkin, P. N. 269-471*

267-189 **Gafurov, M.** Osobennosti razvedki sporadicheski rasprostranennykh vodonosnykh gorizontov presnykh vod metodom VEZ [Features of prospecting for sporadically distributed fresh-water aquifers by the resistivity sounding method]: Uzbek. Geol. Zhur., no. 3, p. 62-65, 1968.

Gage, M. See *McSaveney, M. J. 267-246*

271-335 **Gaibar-Puertas, C.** Declinación geomagnética peninsular [Peninsular geomagnetic declination]: Acta Geol. Hispanica, v. 3, no. 1, p. 2-6, illus., 1968.

264-101 **Galanopoulos, A. G.; Delibasis, N. D.** The seismic activity in the Cyprus area [with Greek abs.]: Akad. Athenon Praktika, 1965, v. 40, p. 387-405, illus., table, 1966.

265-118 **Galanopoulos, Angelos G.** Evidence for the seat of strain-producing forces: Annali Geofisica, v. 18, no. 4, p. 399-409, tables, 1965.

265-125 **Galanopoulos, Angelos G.** The seismotectonic regime in Greece: Annali Geofisica, v. 20, no. 1, p. 109-119, illus., table, 1967.

271-059 **Galanopoulos, Angelos G.** Greece—A catalog of shocks with $I_o>VI$ or $M>5$ for the years 1801-1958: Athens, Athens Univ. Seismol. Laboratory, 119 p., table, 1960.

271-060 **Galanopoulos, Angelos G.** Greece—A catalogue of shocks with I_o/VII for the years prior to 1800: Athens, Athens Univ. Seismol. Laboratory, 19 p., table, 1961.

272-109 **Galanopoulos, Angelos G.** The earthquake activity in the physiographic provinces of the eastern Mediterranean Sea: Annales Géol. des Pays Helléniques, v. 21, p. 178-209, illus., table, 1968.

272-110 **Galanopoulos, Angelos G.** On quantitative determination of earthquake risk: Annali Geofisica, v. 21, no. 2, p. 193-206, illus., tables, 1968.

267-145 **Galbraith, Frank W.; Schreiner, Robert N.** Shock spectra from subsurface nuclear explosions: Am. Soc. Civil Engineers Proc., v. 94, paper 6140, Jour. Eng. Mechanics Div., no. EM5, p. 1015-1027, illus., tables, 1968.

269-226 **Galbraith, Frank W.** Effect of a fault on explosion-generated ground shock spectra: Seismol. Soc. America Bull., v. 58, no. 6, p. 2033-2041, illus., 1968.

Galdin, N. Ye. See *Volarovich, M. P. 268-160*

268-162 **Galdin, N. Ye.** Izucheniye skorostey uprugikh voln pri vysokikh davleniyakh v obraztsakh gornykh porod, otobrannykh vdol’ regional’nogo profilya GSZ na Kol’skom poluostrove [Study of elastic wave velocities under high pressures in rock samples collected along a regional deep seismic sounding profile on the Kola Peninsula], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel’stvo “Nauka,” p. 133-139, illus., table, 1968.

272-270 **Gal’din, N. Ye.** K voprosu o sostave i uprugikh parametrakh verkhney mantii [On the problem of the composition and elastic parameters of the upper mantle]: Akad. Nauk SSSR Doklady, v. 182, no. 3, p. 565-568, illus., tables, 1968.

Gale, A. W. See *Hamilton, R. M. 271-048*

269-047 **Gale, N. H.** Development of delayed neutron technique as rapid and precise method for determination of uranium and thorium at trace levels in rocks and minerals, with applications to isotope geochronology, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 431-452, illus., tables, 1967.

274-050 **Gale, W.; Liwshitz, M.; Sinclair, A. C. E.** Venus—An isothermal lower atmosphere: Science, v. 164, no. 3883, p. 1059-1060, illus., 1969.

266-418 **Galimov, E. M.; Petersil’ye, I. A.** Izotopnyy sostav ugleroda bitumov izverzhennykh i metamorficheskikh porod [The isotopic composition of carbon in bitumens in igneous and metamorphic rocks]: Akad. Nauk SSSR Doklady, v. 182, no. 1, p. 186-189, table, 1968.

267-367 **Galimov, E. M.; Girin, Yu. P.** Izmeneniye izotopnogo sostava ugleroda v protsesse obrazovaniya karbonatnykh konkretsiy [Variation in the isotopic composition of carbon in the process of formation of carbonate concretions (with English summ.)]: Geokhimiya, no. 2, p. 228-233, illus., tables, 1968.

273-326 **Galimov, E. M.** Die Isotopenzusammensetzung des Kohlenstoffs in den Gasen der Erdkruste [The isotopic composition of the carbon in gases in the Earth’s crust]: Zeitschr. Angew. Geologie, v. 15, no. 2, p. 63-70, illus., tables, 1969.

269-154 **Galkiewicz, T.** Geocosmology, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 145-149, 1968.

266-394 **Galkin, I. N.; Nikolayev, A. V.** Opyt issledovaniya mutnosti zemnoy kory i verkha mantii po amplitudam prelomlennykh voln [Attempt to investigate the turbidity of the Earth’s crust and top of the mantle on the basis of amplitudes of refracted waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 36-47, illus., tables, 1968.

274-346 **Galkin, R. M.** Separation of the space and time variations of the magnetic field, according to observations on drifting stations: Geomagnetism and Aeronomy, v. 8, no. 6, p. 912-913, illus., 1968.

Galkina, E. B. See *Vasin, V. S. 264-581*

264-195 **Galli, M.; Randi, P.** On the design of the optimum numerical filter with a prefixed response: Annali Geofisica, v. 20, no. 4, p. 404-414, illus., 1967.

266-449 **Gallon, T. E.** The remanent magnetization of haematite single crystals: Royal Soc. [London] Proc., sec. A, v. 303, no. 1475, p. 511-524, illus., tables, 1968.

266-450 **Gallon, T. E.** The ferromagnetic domain structure of haematite: Royal Soc. [London] Proc., sec. A, v. 303, no. 1475, p. 525-529, illus., 1968.

Galloway, James. See *Goldberg, Edward D. 270-249*

9-640 **Gal'perin, Ye. I.; Frolova, A. V.** Sposob obrabotki prostranstvennykh zondirovaniy obmennymi otrazhennymi volnami [A method of processing spatial sounding by means of converted reflected waves]: Razved. Geofizika, no. 26, p. 29-33, illus., 1968.

2-499 **Gal'perina, R. M.** K voprosu o fizicheskikh osnovakh i razvedochnykh vozmozhnostyakh metoda obmennykh prokhodyashchikh voln po dannym vertikal'nogo seysmicheskogo profilirovaniya [On the problem of the physical bases and exploration possibilities of the method of converted traveling waves according to data of vertical seismic profiling]: Akad. Nauk SSSR Doklady, v. 182, no. 2, p. 334-336, 1968.

4-492 **Galuzo, L. P.** O vliyanii vremen srabatyvaniya i otpuskaniya ARU na amplitudnuyu vyrazitel'nost' zapisi seysmicheskikh kolebaniy [On the effect of AGC response and release times on the amplitude expression in records of seismic vibrations]: Prikladnaya Geofizikc, no. 50, p. 114-118, illus., tables, 1967.

Galyavich, A. Sh. See *Trufanov, V. V. 265-688*

Galyavich, A. Shch. See *Komarov, S. G. 273-507*

Gamoyan, V. B. See *Arutyunyan, G. V. 274-189*

Gangadhara Rao. See *Bhaskara Rao, V. 271-287*

Ganguli, D. K. See *Nomokonov, V. P. 265-608*

1-516 **Ganguli, D. K.; Sen Gupta, S.** An analysis of ground vibrations in the vicinity of small explosions: Indian Geophys. Union Jour., v. 3, no. 2, p. 59-73, illus., tables, 1966.

0-188 **Gansser, Augusto.** The Indian Ocean and the Himalayas, a geological interpretation: Eclogae Geol. Helvetiae, v. 59, no. 2, p. 831-848, illus., 1966.

7-257 **Gantar, C.; Morelli, C.; Pisani, M.** Information report on surface gravity and magnetic measurements with the ship "Bannock" in the Mediterranean Sea, 1964-1968.5 [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 134-157, illus., tables, 1968.

Gapcynski, John P. See *Tolson, Robert H. 268-105*

3-207 **Gaponenko, G. I.; Litinskiy, V. A.; Levin, D. V.; Orlov, A. N.; Pol'kin, Ya. I.** Geologo-tektonicheskoye stroyeniye dna morey Laptevykh i zapadnoy chasti Vostochno-Sibirskogo po geofizicheskim dannym [Geological-tectonic structure of the Arctic Sea bottom and of the western part of East Siberia according to geophysical data], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 20-32, illus., 1968.

3-302 **Gaponenko, G. I.; Gushchin, N. V.; Zatsepin, Ye. N.** Vychisleniye anomaliy sily tyazhesti v reduktsii Faya i Buge s analizom oshibok yedinichnogo izmereniya g_{naN}. na tochke i v reyse na BESM-2 [Calculation of gravity anomalies in free-air and Bouguer reduction with an analysis of error of unified measurement of g_{onx} at a point and on traverse on a BESM-2 computer], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 154-159, 1968.

Garagozov, D. See *Puchkov, S. V. 264-153*

Garand, Marcel. See *Tazieff, Haroun. 269-691*

3-155 **Garanin, V. A.** O zavisimosti pogloshchayushchikh i skorostnykh svoystv dvukhfaznykh sred ot vyazkosti porozapolnitelya [On the dependence of the absorbing and velocity properties of two-phase mediums on the viscosity of the pore filling]: Prikladnaya Geofizika, no. 52, p. 83-92, illus., tables, 1968.

267-124 **García C., José.** Earthquakes in Mexico, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 75-99, illus., tables, 1966.

275-233 **García Cogollor, Angel.** Introduction al estudio gravimétrico de Fernando Poo [Introduction to a gravimetric study of Fernando Poo]: Madrid, Spain, Instituto Geografico y Catastral, 93 p., illus., tables, 1967.

264-096 **García M., Wilfredo.** Observationes sobre los daños producidos por el sismo del 24 Setiembre de 1963, en los pueblos de Manás, Gorgor y Rajanya (Provincia de Catajambo, departamento de Lima) [Observations on the damage produced by the earthquake of September 24, 1963, in the villages of Manás, Gorgor, and Rajanya (Province of Catajambo, department of Lima)]: [Peru] Com. Carta Geol. Nac. Bol., no. 13, p. 111-117, illus., 1966.

264-098 **García M., Wilfredo.** Movimientos sismicos ocurridos en Abancay en Diciembre de 1963 y Enero y Febrero de 1964 (Provincia de Abancay, departamento de Apurimac) [Seismic movements occurring in Abancay in December 1963 and January and February 1964 (Province of Abancay, department of Apurimac)]: [Peru] Com. Carta Geol. Nac. Bol., no. 13, p. 143-151, illus., 1966.

274-480 **Garcia, Martin Nava.** Production profiles in the producing well on pilot test for water injection to the Jurassic reservoir of the San Andrés field, in the state of Veracruz, Mexico, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. N1-N21, illus., 1969.

Garde, S. C. See *Qureshy, M. N. 268-264*

274-265 **Garde, S. C.** An automated programme of gravity reductions at the National Geophysical Research Institute: [India] Natl. Geophys. Research Inst. Bull., v. 5, no. 3, p. 73-84, illus., table, 1967.

Garde, Subhash C. See *Negi, Janardan G. 275-221*

Gardner, F. F. See *Davies, R. D. 266-084*

272-537 **Gardner, G. H. F.; Harris, M. H.** Velocity and attenuation of elastic waves in sands, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. M1-M19, illus., 1968.

Garfield, Donald. See *Gow, Anthony J. 264-234*

Garfunkel, Zwi. See *Freund, Raphael. 267-217*

Garipay, R. R. See *Lucas, J. W. 267-079*

Garipay, R. R. See *Vitkus, G. 268-081*

Garipov, R. M. See *Bichenkov, Ye. I. 271-120*

266-578 **Garkalenko, I. A.** Rayonirovaniye Bol'shogo Donbassa po fizicheskim svoystvam [Zoning of the Greater Donets Basin on the basis of physical properties (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 51-60, illus., 1968.

Garkalenko, I. A. See *Subbotin, S. I. 268-333*

Garkalenko, I. A. See *Subbotin, S. I. 269-372*

Garland, G. D. See *Wright, J. A. 264-278*

Garland, G. D. See *Hermance, J. F. 265-213*

266-300 **Garland, G. D.** Possible rates of relative continental motion [with French abs. *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat

Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 19-24, illus., 1968.

74-211 **Garland, G. D.** Canadian Geophysical Bulletin, V. 21: Ottawa, Canada, Natl. Research Council Canada Comm. Geodesy and Geophysics, 288 p., 1968.

74-291 **Garrick, R. A.** A reinterpretation of the Wellington crustal refraction profile: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1280-1294, illus., tables, 1968.

67-051 **Garris, M. A.; Postnikov, D. V.; Popov, Yu. N.; Orlov, L. I.; Shlychkin, P. D.; Kozyar, V. F.** Rezul'taty izucheniya razreza i kerna po opornoy skvazhin 2000 (rayon g. Tuymazy) [Results of study of the section and core from stratigraphic borehole 2000 (Tuymazy region)], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 295-305, illus., tables, 1968.

Gasilovskiy, K. S. See *Raykher, L. D. 266-525*

68-612 **Gaskell, T. F.** Apparatura bokovogo ekholotirovaniya "Asdik" [The sideways echo-sounding apparatus "Asdic"], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 194-198,1967.

Gasparini, P. See *Imbo, Giuseppe. 270-443*

66-293 **Gass, I. G.** Is the Troodos massif of Cyprus a fragment of Mesozoic ocean floor?: Nature, v. 220, no. 5162, p. 39-42, illus., table, 1968.

70-183 **Gass, I. G.; Gibson, I. L.** Structural evolution of the rift zones in the Middle East: Nature, v. 221, no. 5184, p. 926-930, illus., 1969.

Gast, P. W. See *Hills, F. Allan. 267-006*

Gast, P. W. See *Oversby, V. M. 270-252*

Gast, P. W. See *Oversby, V. M. 272-003*

67-318 **Gast, Paul W.** Trace element fractionation and the origin of tholeiitic and alkaline magma types: Geochim. et Cosmochim. Acta, v. 32, no. 10, p. 1057-1086, illus., table, 1968.

69-362 **Gast, Paul W.** Upper mantle chemistry and evolution of the Earth's crust, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 15-27, illus., tables, 1968.

72-282 **Gast, Paul W.** The isotopic composition of lead from St. Helena and Ascension Islands: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 353-359, illus., table, 1969.

66-279 **Gastil, R. Gordon.** How good is the evidence for 450 miles of offset on the San Andreas fault, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 208-211, illus., 1968.

66-284 **Gastil, R. Gordon.** Fault systems in northern Baja California and their relation to the origin of the Gulf of California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 283-286, illus., 1968.

74-298 **Gat, Joel R.; Mazor, E.; Tzur, Y.** The stable isotope composition of mineral waters in the Jordan Rift Valley in Israel: Jour. Hydrology, v. 7, no. 3, p. 334-352, illus., table, 1969.

Gattinger, T. See *Davis, G. H. 264-317*

268-084 **Gault, D. E.; Adams, J. B.; Collins, R. J.; Kuiper, G. P.; Masursky, H.; O'Keefe, J. A.; Phinney, R. A.; Shoemaker, E. M.** Lunar theory and processes, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 267-313, illus., 1968.

275-077 **Gault, D. E.; Adams, J. B.; Collins, R. J.; Kuiper, G. P.; Masursky, H.; O'Keefe, J. A.; Phinney, R. A.; Shoemaker, E. M.** Lunar theory and processes, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 389-405, illus., 1969.

273-058 **Gault, Donald E.; Quaide, William L.; Oberbeck, Verne R.** Impact cratering mechanics and structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 87-99, illus., 1968.

Gavelyan, A. P. See *Morozov, M. D. 275-182*

266-045 **Gavrikov, S. I.** O vozraste i svyazi zolotogo i redkometal'no-zolotogo orudeneniya s nekotorymi mezozoyskimi granitoidami Verkhne-Indigirskogo rudnogo rayona [On the age and relationships of the gold and the gold-rare metal mineralization to some Mesozoic granitoids of the Upper Indigir ore region]: Vses. Nauchno-Issled. Geol. Inst. Trudy, v. 135, p. 74-87, illus., tables, 1967.

275-288 **Gavrikova, S. N.; Vinogradov, V. I.** Ob izotopnom sostave sery v mineralakh mednogo mestorozhdeniya Karabas (Tsentral'nyy Kazakhstan) [On the isotopic composition of the sulfur in minerals of the Karabas copper deposit (Central Kazakhstan)], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 115-117, table, 1967.

275-390 **Gavrilenko, I. A.** Proslezhivaniye plastovoy intruzii trappov po dannym MOV v Prilenskom rayone [Tracing layer intrusions of traps on the basis of seismic reflection data in the Lena region (with English summ.)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 116-120, illus., table, 1969.

266-085 **Gavrilov, I. V.** Geometricheskaya figura i razmery Luny [The geometric figure and dimensions of the Moon (with English summ.)]: Astron. Zhur., v. 45, no. 2, p. 399-407, illus., tables, 1968.

266-086 **Gavrilov, I. V.** Nekotoryye gipsometricheskiye osobennosti figury Luny [Some hypsometric features of the figure of the Moon (with English summ.)]: Astron. Zhur., v. 45, no. 3, p. 658-662, illus., 1968.

267-365 **Gavrilov, Ye. Ya.; Kortsenshteyn, V. N.; Spevak, Yu. A.; Teplinskiy, G. I.; Filin, A. S.** Izotopnom sostave argona v rastvorennykh gazakh podzemnykh vod i zalezhakh uglevodorodov Vostochnogo i Tsentral'nogo Predkavkaz'ya [On the isotopic composition of argon in gases dissolved in ground waters and hydrocarbon pools in eastern and central Ciscaucasia]: Geokhimiya, no. 1, p. 118-121, illus., table, 1968.

272-291 **Gavrilov, Ye. Ya.; Danov, A. V.; Smakhtina, A. M.; Teplinskiy, G. I.** Izotopnyy sostav argona iz zalezhey uglerodorov Kaganskogo podnyatiya Bukharo-Zhivinskoy neftegazonosnoy oblasti [Isotopic composition of argon from hydrocarbon pools of the Kagan uplift in the Bukhara-Zhivin oil and gas district]: Geokhimiya, no. 7, p. 869-872, 1968.

270-484 **Gaymard, R.; Poupon, A.** Response of neutron and formation density logs in hydrocarbon bearing formations: Log Analyst, v. 9, no. 5, p. 3-12, illus., tables, 1968.

Gaynanov, A. G. See *Bobrov, Yu. V. 264-267*

266-245 **Gaynanov, A. G.; Kosminskaya, I. P.; Stroyev, P. A.** Geofizicheskiye issledovaniya glubinnogo stroyeniya Beringom morya [Geophysical invevestigations o the deep structure of the Bering Sea]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 3-11, illus., 1968.

67-325 **Gaynanov, A. G.; Koryakin, Ye. D.** Geofizicheskiye issledovaniya stroyeniya zemnoy kory v oblasti Atlanticheskogo okeana [Geophysical investigations of crustal structure in the region of the Atlantic Ocean]: Moscow, Izdatel'stvo "Nedra," 171 p., illus., tables, 1967.

Gaynanov, A. G. See *Bobrov, Yu. V. 268-278*

68-315 **Gaynanov, A. G.; Zverev, S. M.; Kosminskaya, I. P.; Tulina, Yu. V.; Livshits, M. Kh.; Sichev, P. M.; Tuyezov, I. K.; Fotiadi, E. E.; Milashin, A. P.; Solov'yev, O. N.; Stroyev, P. A.** The crust and the upper mantle in the transition zone from the Pacific Ocean to the Asiatic Continent, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 367-378, illus., 1968.

69-472 **Gaynanov, A. G.; Isayev, Ye. N.; Udintsev, G. B.** Magnitnyye anomalii i morfologiya dna ostrovnykh dug severo-zapadnoy chasti Tikhogo okeana [Magnetic anomalies and bottom topography of the island arcs of the northwestern part of the Pacific Ocean (with English summ.)]: Okeanologiya, v. 8, no. 6, p. 1017-1024, illus., 1968.

Gaynanov, A. G. See *Vashchilov, Yu. Ya. 270-217*

Gazaryan, G. O. See *Badalyan, S. V. 264-193*

67-181 **Gazaryan, G. O.** Oprobovaniye apparatury ARSh-1 na mestorozhdennykh Armenii [Testing the ARSh-1 apparatus on deposits in Armenia]: Geofiz. Apparatura, no. 34, p. 176-178, illus., 1967.

75-160 **Gazaryan, G. O.** Rezul'taty oprobovaniya sverkhdlinnovolnovogo varianta metoda radiokip v Armenii [Results of testing the ultralong wave variant of the "radiokip" method in Armenia]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, nos. 3-4, p. 63-66, illus., 1965.

75-163 **Gazaryan, G. O.** K voprosu o skvazhinnom variante metods SDV-radiokip [On the problem of a borehole variant of the ultralong-wave "radiokip" method]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 19, no. 6, p. 98-100, illus., 1966.

Gazzarrini, F. See *Colombo, U. 266-410*

Gearhart, Marvin. See *Hawkins, William K. 269-695*

Gearhart, Marvin. See *Hawkins, William K. 272-544*

Gedney, Larry. See *Hanson, Kenneth. 267-573*

72-094 **Gedney, Larry; Berg, Eduard.** The Fairbanks earthquakes of June 21, 1967—Aftershock distribution, focal mechanisms, and crustal parameters: Seismol. Soc. America Bull., v. 59, no. 1, p. 73-100, illus., tables, 1969.

73-124 **Gedney, Larry; Berg, Eduard.** Some characteristics of the tectonic stress pattern in Alaska: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 293-304, illus., table, 1969.

75-102 **Gedney, Larry; Berg, Eduard; Pulpan, Hans; Davies, John; Feitham, William.** A field report on the Rampart, Alaska earthquake of October 29, 1968: Seismol. Soc. America Bull., v. 59, no. 3, p. 1421-1423, illus., 1969.

Gees, Rudolf A. See *Muller, Gerhard. 265-630*

Geiger, P. J. See *Horowitz, N. H. 274-049*

Geiss, J. See *Liener, A. 266-053*

Geiss, J. See *Balsiger, H. 267-054*

Geiss, J. See *Eugster, O. 275-033*

272-557 **Gel', E. P.; Dyad'kin, I. G.** O fokusiruyushchem deystvii vysoko-vol'tnogo promezhutka v gazonapolnennoy neytronnoy trubke [On the focusing action of the high-voltage gap in a gas-filled neutron tube], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 151-160, illus., 1968.

Geldart, L. P. See *Jones, F. W. 271-124*

Geldart, L. P. See *Jones, F. W. 272-166*

Gelever, D. A. See *Blokhin, P. A. 269-637*

273-506 **Gel'fand, V. A.** Integral'nyy metod obrabotki diagramm akusticheskogo karotazha [Integral method of processing acoustical logging diagrams]: Razved. Geofizika, no. 29, p. 103-108, illus., 1968.

Geller, L. A. See *Baranskiy, L. N. 265-424*

Geller, L. A. See *Troitskaya, V. A. 274-338*

270-022 **Geller, S.** Alternative explanation of the garnet occurrence in a meteorite: Science, v. 163, no. 3869, p. 829-830, table, 1969.

Gemperle, M. See *Dehlinger, P. 265-355*

268-574 **Geneslay, Raymond; Michon, D.** Morskaya seysmorazvedka [Marine seismic surveying], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 163-172, illus., 1967.

Genin, B. L. See *Andreyev, S. I. 273-401*

Gennadinik, B. I. See *Umyshev, R. 274-191*

272-027 **Gennesseaux, M.; Thommeret, Y.** Datation par le radiocarbone de quelques sédiments sous-marins de la région Niçoise [Radiocarbon dating of some submarine sediments in the Nice region (with English abs.)]: Rev. Géographie Phys. e Geologie Dynam., ser. 2, v. 10, no. 4, p. 375-382, illus., table, 1968.

Gentner, W. See *Mueller, O. 264-048*

Gentner, W. See *Kirsten, T. 265-374*

274-045 **Gentner, W.** Struktur und Alter der Meteorite [Structure and age of the meteorites]: Naturwissenschaften, v. 56, no. 4, p. 174-180, illus., 1969.

Gentry, R. A. See *Hundhausen, A. J. 273-339*

270-147 **Geofizicheskaya Apparatura.** Elektrorazvedochnaya apparatura VNEM na peremennom toke [The VNEM alternating-current electrical exploration apparatus]: Geofiz. Apparatura, no. 36, p. 13-15, illus., 1968.

270-288 **Geofizicheskaya Apparatura.** Portativnyy polevoy magnetometr M-700 [The M-700 portable field magnetometer]: Geofiz. Apparatura, no. 36, p. 9-13, illus., tables 1968.

271-501 **Geofizicheskaya Apparatura.** Neytronnaya pushka NH 3 [The NH 3 neutron irradiation unit]: Geofiz. Apparatura, no. 31, p. 5-10, illus., table, 1967.

271-527 **Geofizicheskaya Apparatura.** Ustroystvo dlya obrabotki seysmogramm CS-621 [The CS-621 device for processing seismograms]: Geofiz. Apparatura, no. 31, p. 11-12, illus., 1967.

272-118 **Geographical Survey Institute.** Geodetic surveys in the area of Matsushiro earthquake swarms: Japan Geog. Survey Inst. Bull., v. 12, pt. 2, p. 20-25, illus., table, 1967.

272-218 **Geographical Survey Institute.** On the gravity standardization program in the Western Pacific Region: Japan Geog. Survey Inst. Bull., v. 12, pt. 2, p. 26-27, 1967.

272-262 **Geophysics Correspondent.** Upper mantle—First derivatives: Nature, v. 222, no. 5193, p. 525, 1969.

Georis, Baudouin. See *Melchior, Paul. 265-178*

Geptner, A. R. See *Virina, Ye. I. 266-477*

267-452 **Gerasimov, M. Ye.; Apareyev, V. N.** O prirode magnitnykh anomaliy Ravninnogo Kryma v svete perspektiv neftegazonosnosti [On the nature of the magnetic anomalies of Lowland Crimea in the light of oil and gas-bearing prospects]: Geol. Zhur., v. 28, no. 4, p. 93-100, illus., table, 1968.

271-529 **Gerasimov. M. Ye.** Pro metodyku seysmīchnykh pobudov v umovakh rīvnynnoho Krymu ī Prysyvashshya [On the procedure of seismic plotting in the conditions of the Crimean plains and the Sivash region (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 4, p. 323-327, illus., 1968.

266-348 **Gerasimov, Yu. G.** Blokovoye stroyeniye zapadnoy chasti Ukrainskogo shchita po geofizicheskim dannym [Block structure of the western part of the Ukrainian Shield according to geophysical data (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 24-30, illus., table, 1967.

270-198 **Gerasimov, Yu. G.** Vozniknoveniye i razvitiye zemnoy kory i mesto radioaktivnosti v etikh protsessakh [Formation and development of the Earth's crust and the place of radioactivity in these processes (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 18-24, 1968.

Gerasimov, Yu. P. See *Urazayev, I. M. 269-475*

272-041 **Gerasimovskiy, V. I.; Stupnikova, N. I.; Zykov, S. I.** O vozraste intruziy Ilimaussak i Igaliko Gardarskoy provintsii (Yu-Z. Grenlandiya) [On the age of the Ilimaussaq and Igaliko intrusions of the Gardar province (SW Greenland)]: Geokhimiya, no. 9, p. 1134-1136, table, 1968.

267-453 **Geraybekov, Ch. A.** Perekhodnyy rezhim geomagnitnogo polya v perekhodnoy zone razreza produktivnoy tolshchi Atashkya [Transitional regime of the geomagnetic field in the transition zone of the section of the Atashkya producing series], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 68-69, 1967.

272-496 **Gerber, Bernd.** Gerätetechnische Erfahrungen mit der Hammerschlagapparatur EHAS und ZEHAS bei untertägigen reflexionsseismischen Messungen im Kali- und Steinsalzbergbau [Instrument-technical tests with the EHAS and ZEHAS hammerblow apparatus in underground seismic reflection measurements in potash and rock salt mining (with French, English, and Russian summ.)]: Gerlands Beitr. Geophysik, v. 77, no. 5, p. 385-393, illus., table, 1968.

Gerling, E. K. See *Levchenkov, O. A. 265-050*

267-039 **Gerling, E. K.; Yashchenko, M. L.; Varshavskaya, E. S.** Svyaz' mezhdu pervichnym izotopnym sostavom strontsiya i vozrastom porod granitnogo sostava [Relationship between the primary isotopic composition of strontium and the age of rocks of granitic composition (with English summ.)]: Geokhimiya, no. 1, p. 71-76, illus., tables, 1968.

268-025 **Gerling, E. K.; Kratz, K.; Lobach-Zuchenko, S. B.** Precambrian geochronology of the Baltic Shield, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 4, Geology of the Precambrian: Prague, Academia, p. 265-273, illus., 1968.

269-067 **Gerling, E. K.; Morozova, I. M.; Sprintsson, V. D.** On the nature of the excess argon in some minerals, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 9-15, illus., tables, 1968.

Gerling, E. K. See *Kratz, K. O. 273-019*

275-026 **Gerling, E. K.; Shukolyukov, Yu. A.; Kol'tsova, T. V.; Matveyeva, I. I.; Yakovleva, S. S.** Opredeleniye vozrasta Zemli po drevneyshim mineralam i porodam [Determination of the age of the Earth from the oldest minerals and rocks], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 366-373, illus., tables, 1963.

265-602 **Gerling, V. E.; Neymark, G. S.; Omelin, V. M.** Schetno-reshayushcheye ustroystvo dlya beskristal'noy spektrometrii rentgenovskogo izlucheniya [Count-resolving device for noncrystal spectrometry of X-radiation]: Geofiz. Apparatura, no. 32, p. 75-79, illus., 1967.

Gerloff, U. See *Fechtig, H. 264-038*

270-277 **Gernik, V. V.** Perspektivy issledovaniya regional'no metamorfizovannykh tolshch paleomagnitnym metodom [Prospects of investigation of regionally metamorphosed series by the paleomagnetic method]: Akad. Nauk SSSR Doklady, v. 183, no. 4, p. 821-824, illus., table, 1968.

269-679 **Gershanovich, D. E.** New data on geomorphology and recent sediments of the Bering Sea and the Gulf of Alaska: Marine Geology, v. 6, no. 4, p. 281-296, illus., 1968.

Gerstenberger, W. See *Lotzsch, W. 275-435*

268-060 **Gerstenkorn, Horst.** A reply to Goldreich [On the controversy over the effect of tidal friction upon the history of the Earth-Moon system]: Icarus, v. 9, no. 2, p. 394-395, illus., 1968.

273-040 **Gerus, E. A.; Klochko, V. P.; Koltovskaya, F. I.; Velichko, B. K.** Do vyvchennya dokembrīyu pīvnīchno azkhīdnoyi chastyny Malī-Nīhers'koyi syneklīzy (pīvden' Tsentral'noyi Sakhary) [Study of the Precambrian of the northwestern part of the Mali-Niger syneclise (south-central Sahara) (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 3, p. 198-202, illus., 1969.

266-194 **Gerver, M. L.; Markushevich, V. M.** Svoystva godografa ot poverkhnostnogo istochnika [The properties of a traveltime curve from a surface source], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 15-63, illus., 1968.

266-196 **Gerver, M. L.; Kazhdan, D. A.** Nakhozhdeniye skorostnogo razreza po dispersionnoy krivoy. Voprosy yedinstvennosti [Finding the velocity section from the dispersion curve—Questions of uniqueness], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 78-94, illus., 1968.

271-097 **Gerver, M. L.; Markushevich, V. M.** Opredeleniye skorostnogo razreza po godografu [Determination of the velocity section from the traveltime curve], *in*

Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 97-104, illus., 1968.

269-057 **Geyh, M. A.** Experience gathered in the construction of low-level counters, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 575-591, illus., tables, 1967.

271-531 **Geyko, V. S.** Ínterpretatsīy ya' hodohrafa refrahovanoyi khvylī pry nayavnostī sharu z postīynoyu shvydkīstyu, shcho pokryvaye hradīyentne seredovyshche [Interpretation of the refringent wave traveltime curve in the presence of a layer with constant velocity overlying a gradient medium (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 5, p. 424-428, illus., 1968.

271-532 **Geyko, V. S.** Pobudova polya chasu refrahovanoyi khvylī za yiyi hodohrafom pry dovīl'nomu narostannī shvīdkostī z hlybynoyu [Plotting of the time field of a refracted wave from its traveltime curve in the case of an arbitrary increase of velocity with depth (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 6, p. 518-523, 1968.

271-534 **Geyko, V. S.** Vyznachennya skvydkīsnoyi budovy hradīyentnoho seredovyshcha za hodohrafom refrahovanoyi khvyli [Determination of the velocity structure of a gradient medium from a refringent wave traveltime curve (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 10, p. 908-914, 1968.

271-535 **Geyko, V. S.** Hodohrafy vīdbytykh ī refrahovanykh khvyl' deyakykh seredovyshchakh z horīzontal'nym ī vertykal'nym hradīyentom shvydkostī [Traveltime curves of reflected and refringent waves in some mediums with horizontal and vertical velocity gradient (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 11, p. 991-995, illus., 1968.

Gfeller, P. See *Haefeli, R. 273-284*

265-194 **Ghosh, M. L.** On diffraction of SH-waves by the Earth's spheroidal core: Gerlands Beitr. Geophysik, v. 77, no. 2, p. 117-127, illus., 1968.

Ghosh, P. C. See *Tewari, S. G. 265-596*

Ghosh, S. K. See *Ramberg, H. 269-669*

265-190 **Ghosh, S. L.** On the disturbances in an infinite viscoelastic medium due to transient normal forces and transient twists on the surface of a spherical cavity: Pure and Appl. Geophysics, v. 69, p. 12-16, 1968.

266-186 **Ghosh, Subhash Chandra.** Diffraction of SH-waves originating from a moving point source by a rigid quarter space: Pure and Appl. Geophysics, v. 70, no. 2, p. 22-27, illus., 1968.

272-145 **Ghosh, Subhash Chandra.** Diffraction of compressional waves by a rigid quarter-space: Gerlands Beitr. Geophysik, v. 77, no. 5, p. 353-362, illus., 1968.

270-187 **Ghosh, Subir Kumar.** Experiments of buckling of multilayers which permit interlayer gliding: Tectonophysics, v. 6, no. 3, p. 207-249,illus., table, 1968.

265-667 **Ghoshal, S.** Propagation of one-dimensional unloading waves in materials exhibiting yielding delay phenomena: Pure and Appl. Geophysics, v. 69, p. 17-24, illus., 1968.

274-155 **Ghoshal, S.** Waves in a viscous fluid on a rotating sphere: Pure and Appl. Geophysics, v. 73, p. 90-92, 1969.

Gibbs, P. G. See *Blamey, C. 266-179*

267-104 **Giberson, Melbourne F.** Maximum response ranges of nonlinear multi-story structures subjected to earthquakes: Seismol. Soc. America Bull., v. 58, no. 5, p. 1639-1655, illus., tables, 1968.

Gibson, Everett K. See *Moore, Carleton B. 269-090*

Gibson, I. L. See *Gass, I. G. 270-183*

272-489 **Gibson, Ray.** New tools for the geophysicist: World Petroleum, v. 38, no. 3, p. 20-24, 63, illus., 1967.

Gidskehang, A. See *Storetvedt, K. M. 268-406*

267-614 **Giermann, Günter; Pfannenstiel, Max; Wimmenauer, Wolfhard.** Relations entre morphologie, tectonique et volcanisme en mer d'Alboran (Méditerranee occidentale)—Resultats preliminaires de la campagne Jean-Carcot (1967) [Relations between morphology, tectonics and volcanism in the Alboran Sea (western Mediterranean)—Preliminary results of the *Jean-Charcot* voyage (1967)]: Soc. Geol. France Compte Rendu 1968, no. 4, p. 116-118, illus., 1968.

275-041 **Giese, R. H.; Dziembowski, C. V.** Suggested zodiacal light measurements from space probes: Planetary and Space Sci., v. 17, no. 5, p. 949-956, illus., tables, 1969.

Giesecke, A. A., Jr. See *Casaverde, M. 273-166*

269-406 **Giesecke, Alberto A.; Casaverde, Mateo; Kato, Yoshio; Aoyama, Iwao; Takei, Shigeo.** The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator: Rept. Ionosphere and Space Research Japan, v. 22, nos. 1-2, p. 61-69, illus., table, 1968.

Gigl, Paul. See *Dachille, Frank. 273-090*

271-182 **Gilbert, C. M.; Christensen, M. N.; Al-Rawi, Yehya; Lajoie, K. R.** Structural and volcanic history of Mono Basin, California-Nevada, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, p. 275-329, illus., table, geol. map, 1968.

Gilbert, Freeman. See *Backus, Freeman. 267-320*

Gilbert, Freeman. See *Backus, George. 275-101*

Gilbert, R. L. G. See *Brooke, John. 269-677*

271-033 **Gilchrist, J.; Thorpe, A. N.; Senftle, F. E.** Infrared analysis of water in tektites and other glasses: Jour. Geophys. Research, v. 74, no. 6, p. 1475-1483, illus., tables, 1969.

268-013 **Gile, L. H.; Hawley, J. W.** Age and comparative development of desert soils at the Gardner Spring radiocarbon site, New Mexico: Soil Sci. America Proc., v. 32, no. 5, p. 709-716, illus., tables, 1968.

267-014 **Giletti, Bruno J.** Isotopic geochronology of Montana and Wyoming, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 111-146, illus., tables, 1968.

269-014 **Giletti, Bruno J.; Day, H. W.** Potassium-argon ages of igneous intrusive rocks from Peru: Nature, v. 220, no. 5167, p. 570-572, illus., table, 1968.

Gil'kman, A. I. See *Nosovskiy, M. F. 266-342*

266-013 **Gill, E. D.** Multiple factors in the description of Quaternary marine shorelines, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 375-379, 1968.

267-227 **Gill, Edmund D.** (secretary, Quaternary Shorelines Committee). Quaternary shorelines research in Australia and New Zealand: Australian Jour. Sci., v. 31, no. 3, p. 106-111, 1968.

264-051 **Gillerman, Elliot; Hill, Walter E., Jr.** The Belle Plaine III meteorite: Meteoritics, v. 3, no. 3, p. 147-150, illus., 1967.

271-008 **Gilot, E.** Louvain natural radiocarbon measurements VII: Radiocarbon, v. 11, no. 1, p. 106-111, 1969.

265-671 **Gilreath, J. A.** Electric-log characteristics of diapiric shale, *in* Diapirism and diapirs—A symposium: Am. Assoc. Petroleum Geologists Mem. 8, p. 137-144, illus., 1968.

269-142 **Gilvarry, J. J.** Geometric and physical scaling of river dimensions of the Earth and Moon: Nature, v. 221, no. 5180, p. 533-537, illus., table, 1969.

269-144 **Gilvarry, J. J.** Nature of the lunar mascons: Nature, v. 221, no. 5182, p. 732-736, illus., tables, 1969.

Gimpel'son, M. S. See *Tuyezov, I. K. 266-402*

264-500 **Ginodman, A. G.** O selektsii poperechnykh voln po priznaku polyarizatsii kolebaniy [On the selection of transverse waves according to the sign of polarization of vibrations]: Razved. Geofizika, no. 23, p. 3-9, illus., 1967.

Ginodman, A. G. See *Puzyrev, N. N. 269-634*

Ginodman, A. I. See *Brodov, L. U. 268-547*

272-249 **Ginsburg, G. D.** O geotermicheskom gradiyente platformennykh oblastey severa Sibiri [On the geothermal gradient of platform regions of the north of Siberia]: Nauchno-Issled. Inst. Geologii Arktiki, Uchenyye Zapiski, Regional'nay.geologiya, no. 13, p. 167-174, illus., table, 1968.

269-617 **Ginzburg, Avihu.** Recent improvements in the quality of seismic reflection data in Israel, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 504-509, illus., 1967.

266-430 **Giorgi, M.; Scotto, V.** Il magnetometro a pompaggio ottico [The optical pumping magnetometer (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 15th Ann., Rome, 1966, Atti: Rome, Consiglio Nazionale Ricerche, p. 537-564, illus., tables [1967,].

266-431 **Giorgi, M.; Yokoyama, I.** Anomalie delle variazioni geomagnetiche osservate all-'isola della Maddalena (Sardegna) [Anomaly of geomagnetic variation observed on Maddalena Island (Sardinia) (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 16th Ann., Naples, 1967, Atti: Rome, Consiglio Nazionale Ricerche, p. 253-259, illus., 1968.

265-438 **Girdler, R. W.** Drifting and rifting of Africa: Nature, v. 219, no. 5154, p. 600, 1968.

265-440 **Girdler, R. W.** A paleomagnetic investigation of some late Triassic and early Jurassic volcanic rocks from the northern Pyrenees [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 695-708, illus., tables, 1968.

268-295 **Girdler, R. W.** Statistical analyses of terrestrial heat flow and seismicity of the Pacific Ocean, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 35-39, illus., 1968.

268-398 **Girdler, R. W.** The palaeomagnetic latitudes of possible ancient glaciations, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 115-118, 178, table, 1964.

Girdler, R. W. See *Fairhead, J. D. 270-072*

269-462 **Giret, R.** The contribution to oil exploration of digital recording at 1/10 of a gamma of the Earth's magnetic field, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 478-481, illus., 1967.

268-441 **Giret, Raoul I.** Aeromagnitnyye metody, primenyayemyye dlya razvedki na neft' v morskikh usloviyakh [Aeromagnetic methods used for petroleum prospecting in marine conditions], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 172-178, illus., 1967.

Girin, Yu. P. See *Galimov, E. M. 267-367*

265-120 **Girlando, Antonio; Federico, B.** La "discontinuità 20°" [The "20°-discontinuity" (with English summ.)]: Annali Geofisica, v. 19, no. 2, p. 131-189, tables, 1966.

275-178 **Girshgorn, L. Sh.** Osnovnyye cherty tektonicheskogo stroyeniya platformennogo kompleksa otlozheniy severa Zapadnoy Sibirii [Main features of the tectonic structure of the platform complex of formations in the north of West Siberia]: Geologiya Nefti i Gaza, no. 2, p. 38-42, illus., 1969.

264-081 **Giuli, R. T.** Gravitational accretion of small masses attracted from large distances as mechanism for planetary rotation: Icarus, v. 9, no. 1, p. 186-190, illus., 1968.

270-479 **Givens, W. W.; Caldwell, R. L.; Mills, W. R., Jr.** Cyclic activation logging: Log Analyst, v. 9, no. 3, p. 18-21, illus., 1968.

Givens, W. W. See *Hilchie, D. W. 270-495*

Givens, W. W. See *Hilchie, D. W. 272-541*

Givens, W. W. See *Hilchie, D. W. 273-502*

Gjellestad, G. See *Storetvedt, K. M. 265-439*

Gladkov, N. A. See *Ponomarev, Ye. A. 273-206*

Gladun, V. A. See *Bobrov, Yu. V. 264-267*

Gladun, V. A. See *Bobrov, Yu. V. 268-278*

267-416 **Glangeaud, F.; Roquet, J.; Selzer, E.** Microstructures à diverses latitudes et composition spectrale des perturbations magnétiques de février 1965 et mars 1966 [Microstructures at various latitudes and spectral composition of magnetic perturbations of February 1965 and March 1966 (with English abs.)]: Annales Géophysique, v. 24, no. 3, p. 871-877, illus., 1968.

272-339 **Glangeaud, François.** Conditions suivant lesquelles peutêtre définie la notion d'un parcours au sol pour certaines pulsations du champs magnétique terrestre [Conditions according to which the idea of the course to the ground of certain pulsations of the geomagnetic field can be defined]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 1, p. 113-116, illus., table, 1969.

269-311 **Glangeaud, Louis.** Les méthodes de la géodynamique et leurs applications aux structures de la Méditerranee occidentale [Methods of geodynamics and their applications to structures of the western Mediterranean [with English abs.)]: Rev. Géographie Phys. et Geologie Dynam., ser. 2, v. 10, no. 2, p. 83-135, illus., 1968.

Glasko, V. B. See *Savarenskiy, Ye. F. 270-337*

Glasko, V. B. See *Tikhonov, A. N. 271-293*

Glasko, V. B. See *Savarenskiy, Ye. F. 274-409*

Glass, B. See *Cassidy, W. A. 270-020*

64-044 **Glass, Billy P.** Glassy objects (microtektites?) from deep-sea sediments near the Ivory Coast: Science, v. 161, no. 3844, p. 891-893, illus., 1968.

72-043 **Glass, Billy P.** Silicate spherules from Tunguska impact area—Electron microprobe analysis: Science, v. 164, no. 3879, p. 547-549, illus., table, 1969.

Glass, N. W. See *Belon, A. E. 268-373*

Glazunova, A. V. See *Amurskiy, G. I. 269-273*

Glebova, A. N. See *Solov'yev, S. L. 265-174*

Glevasskaya, A. M. See *Mikhaylova, N. P. 272-375*

Glovatsky, D. N. See *Lebedinskiy, A. I. 268-098*

Glover, P. See *Kovach, R. L. 266-100*

69-357 **Glover, Peter; Alexander, S. S.** Lateral variations in crustal structure beneath the Montana LASA: Jour. Geophys. Research, v. 74, no. 2, p. 505-531, illus., tables, 1969.

75-216 **Gluck, Serge.** Épaisseur du Glacier Blanc (massif de l'Oisans) dans partie superieure [Thickness of the upper part of Glacier Blanc (Oisans massif)]: Acad. Sci. Comptes Rendus, ser. D, v. 268, no. 12, p. 1583-1585, illus., 1969.

74-074 **Glushneva, I. N.** Novoye opredeleniye zavisimosti al'bedo Venery ot dliny volny v ul'trafioletovoy oblasty spektra [New determination of the dependence of the albedo of Venus on wave length in the ultraviolet region of the spectrum (with English summ.)]: Astron. Zhur., v. 46, no. 1, p. 211-214, illus., table, 1969.

Gnevyshev, M. N. See *Matveyeva, E. T. 273-368*

Gnidchin, V. M. See *Rogachev, B. V. 274-190*

Gochev, P. M. See *Bonchev, E. 272-116*

68-422 **Godby, E. A.; Hood, Peter J.; Bower, Margaret E.** Aeromagnetic profiles across the Reykjanes Ridge southwest of Iceland: Jour. Geophys. Research, v. 73, no. 24, p. 7637-7649, illus., 1968.

68-538 **Godson, Richard H.; Watkins, Joel S.** Seismic resonance investigation of a near-surface cavity in Anchor Reservoir, Wyoming: Assoc. Eng. Geologists Bull., v. 5, no. 1, p. 27-36, illus., 1968.

Goebel, L. See *Charalambus, S. 272-061*

Goel, P. S. See *Trivedi, B. M. P. 275-268*

Goforth, Tom T. See *McDonald, John A. 274-138*

271-260 **Gofshteyn, I. D.** Absolyutna skvydkīst' vertykal'nykh tektonīchnykh rukhīv (na prykladī Karpat) [Absolute rate of vertical tectonic movements (illustrated by the Carpathians) (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 9, p. 778-780, table, 1968.

264-367 **Gogatishvili, Ya. M.** Distribution of short-period pulsations within geomagnetic storms: Geomagnetism and Aeronomy, v. 7, no. 6, p. 912-914, illus., table, 1967.

265-428 **Gogatishvili, Ya. M.** Nekotoryye osobennosti vozniknoveniya pul'satsii geomagnitnogo polya v gody minimuma aktivnosti Solntsa [Some features of geomagnetic pulsations in years of minimum activity of the Sun]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 26, no. 1, p. 28-32, illus., table, 1966.

269-200 **Gogna, M. L.** Travel times of PKP from Pacific earthquakes: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 489-514, illus., tables, 1968.

Gojgic, D. See *Arsovski, M. 268-131*

271-133 **Gokhberg, M. B.; Dubrovskiy, V. G.; Nepesov, K.** Rezul'taty ispol'zovaniya magnitnykh bur' dlya glubinnogo zondirovaniya v Turkmenii [Results of the use of magnetic storms for deep sounding in Turkmenia]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 97-105, illus., table, 1968.

273-086 **Gold, D. P.** A study of quartz subfabrics from the Brent crater, Ontario, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 495-508, illus., 1968.

Gold, D. P. See *Aitken, F. K. 273-088*

Gold, D. P. See *Deines, P. 274-296*

264-075 **Gold, T.; Simon, M.; Condon, J. J.** A search for lunar outgassing: Planetary and Space Sci., v. 16, no. 6, p. 825, 1968.

270-249 **Goldberg, Edward D.; Somayajulu, B. L. K.; Galloway, James; Kaplan, I. R.; Faure, Gunter.** Differences between barites of marine and continental origins Geochim. et Cosmochim. Acta, v. 33, no. 2, p. 287-289, tables, 1969.

Goldberg, Edward D. See *Bernat, Michel. 272-281*

Goldberg, Moshe. See *McKee, Edwin D. 269-663*

265-259 **Gol'dgefter, V. I.; Rybin, V. K.** Izbiratel'nyye RC-fil'try na emitternykh povtoritelyakh [Selective RC-filters on emitter repeaters]: Geofiz. Apparatura, no. 32, p 80-85, illus., 1967.

265-284 **Gol'dgefter, V. I.** Pogreshnost' izmereniya slabykh garmonicheskikh signalov na fone normal'nogo shuma [Error of measurement of weak harmonic signals on a background of normal noise]: Geofiz. Apparatura, no. 32, p. 86-96, 1967.

270-172 **Gol'dgefter, V. I.; Prots', R. V.; Rybin, V. K.** Raschet i vybor elementov attenyuatora s postoyannym vykhodnym soprotivleniyem [Calculation and choice of elements of the attenuator with constant output resistance]: Geofiz. Apparatura, no 35, p. 141-146, illus., 1968.

274-206 **Gol'dgefter, V. I.** Raschet malykh izmeneniy magnitnogo polya ferromagnitnoy obolochki v forme ellipsoida vrashcheniya ot izmeneniy pronitsayemosti obolochki [Calculation of small variations of the magnetic field of a ferromagnetic shell in the shape of an ellipsoid of revolution from measurements of the permeability of the shell], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad Nauk Ukrain. SSR, p. 120-125, illus., 1965.

4-207 **Gol'dgefter, V. I.** Srednekvadratichenoye slozheniye izmenyayushchikhsya po sinusoidal'nomu zakonu velichin [The mean square summation of values varying according to a sinusoidal law], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 126-128, 1965.

3-026 **Goldich, S. S.** Geochronology in the Lake Superior region, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 715-724, illus., tables, 1968.

4-569 **Gol'din, I. M.** Primeneniye gamma-gamma-karotazha dlya kontrolya tsementirovaniya skvazhin v usloviyakh Zapadnoy Sibiri [Use of gamma-gamma logging to monitor the cementation of wells in the conditions of Western Siberia]: Razved. Geofizika, no. 23, p. 112-114, illus., 1967.

7-589 **Gol'din, S. V.** Fazovoye predstavleniye seysmicheskikh signalov [Phase representation of seismic signals]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 5, p. 65-72, illus., 1968.

8-556 **Gol'din, S. V.** Ob optimal'nom uslovnom obnaruzhenii seysmicheskikh voln [On the optimum conditions for detection of seismic waves]: Prikladnaya Geofizika, no. 52, p. 93-103, 1968.

8-571 **Gol'din, S. V.** Analiz zamknutoy korrelyatsii seysmicheskikh voln [Analysis of closed correlation of seismic waves]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 7, p. 82-94, illus., 1968.

5-388 **Goldin, S. V.** Odnovremennoye raspoznavaniye obrazov v svyazi s korrelyatsiyey seysmicheskikh voln [Simultaneous identification of images in connection with the correlation of seismic waves (with English summ., p. 148)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 68-77, 1969.

8-059 **Goldreich, Peter.** On the controversy over the effect of tidal friction upon the history of the Earth-Moon system, a reply to comments by H. Gerstenkorn: Icarus, v. 9, no. 2, p. 391-393, 1968.

4-353 **Goldreich, Peter; Toomre, Alar.** Some remarks on polar wandering: Jour. Geophys. Research, v. 74, no. 10, p. 2555-2567, illus., 1969.

Goldstein, B. See *Siscoe, G. L. 271-330*

Goldstein, R. M. See *Zohar, S. 264-086*

4-059 **Goldstein, Richard M.** A radar view of the surface of Venus, *in* The planet Venus—Past, present, and future—Symposium commemorating the Society's participation in observations of a Transit of Venus, June 3, 1769, Philadelphia, 1968: Am. Philos. Soc. Proc., v. 113, no. 3, p. 224-228, illus., 1969.

0-068 **Goldthwait, Richard P.** Hydrologic hazards from earthquakes, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 405-414, 1968.

0-086 **Golenetskiy, S. I.; Odegova, M. V.; Anisimova, L. V.** Otsenka pogreshnostey krivykh uvelicheniya seysmografov Irkutskoy seysmicheskoy stantsii [Assessment of the errors in the magnification curves of the seismographs of the Irkutsk seismic station (with English summ., p. 164)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 102-108, tables, 1968.

Goles, Gordon. See *Williams, Howel. 275-422*

4-132 **Golinskiy, G. L.; Lagutochkina, K. D.; Nepesov, R. D.** Zemletryaseniya Kopet-Daga [Earthquakes in the Kopet Dag], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 34-49, illus., tables, 1967.

Golinskiy, G. L. See *Nepesov, R. D. 264-151*

265-168 **Golinskiy, G. L.; Kallaur, T. N.; Lagutochkina, K. D.; Nepesov, R. D.; Rakhimov A. R.** Zemletryaseniya Kopet-Daga [Earthquakes in the Kopet-Dag], *in* Zem letryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p 38-43, illus., tables, 1967.

Golinskiy, G. L. See *Leonov, N. N. 265-171*

264-273 **Golizdra, G. Ya.** Ob osobykh tochkakh analiticheskogo prodolzheniya proizvod nykh gravitatsionnogo potentsiala [On the special points of an analytical continua tion of the derivatives of the gravity potential (with English summ.)]: Akad. Nau Ukrain. SSR Geofiz. Sbornik, no. 23, p. 16-27, illus., 1968.

275-239 **Golizdra, G. Ya.; Baklanov, N. I.** O vliyanii smeshcheniya nul'punkta rychago gravitatsionnogo variometra na tochnost' izmereniya vtorykh proizvodnykh potentsi ala [On the effect of zero point drift of the arms of a torsion balance on the accurac of measurements of the second derivatives of the potential (with English summ.)] Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 31-42, illus., 1969.

273-192 **Gol'mshtok, A. Ya.; Sochel'nikov, V. V.** Resheniye zadachi morskikh magnitote luricheskikh zondirovaniy [Solution of the problem of marine magnetotelluri soundings]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 47-56, illus., 1969.

264-413 **Golovkov, V. P.; Pushkov, A. N.** Sensitive method of measuring magnetostrictio in rocks in a broad temperature range: Geomagnetism and Aeronomy, v. 8, no. 1, 98-100, illus., 1968.

267-445 **Golovkov, V. P.** Volume magnetostriction of magnetite: Geomagnetism an Aeronomy, v. 8, no. 2, p. 312-313, illus., 1968.

Golovkova, R. G. See *Makarevich, K. G. 275-220*

Golson, J. See *Polach, H. A. 265-010*

271-246 **Gol'ts, S. I.; Dubrovskiy, M. V.** Paleogeografiya i neotektonika Kostromsko Zavolsh'ya [Paleogeography and neotectonics of the Kostrom area beyond the Vo ga], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy ko (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 167-174, illus 1968.

272-503 **Gol'tsin, S. V.** O fazovykh (ekstremal'nykh) algoritmakh korrelyats seysmicheskikh voln [On phase (extremal) algorithms for seismic wave correlation Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 101-10 1968.

275-150 **Gol'tsman, F. M.; Kovtun, A. A.; Porokhova, L. N.** Voprosy mashinnoy i terpretatsii krivykh MTZ [The problem of computer interpretation of magnetotell ric sounding curves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 96-99, illus., t ble, 1969.

275-192 **Gol'tsman, F. M.** Statisticheskoye modelirovaniye izobrazheniy geofizicheski ob"yektov [Statistical modeling of the depiction of geophysical objects]: Aka Nauk SSSR Izv. Fizika Zemli, no. 4, p. 14-28, 1969.

Golub, D. P. See *Roze, Ye. N. 267-466*

265-067 **Golubchina, M. N.** Izmereniye izotopnogo sostava svintsa na mass-spektromet [Measurement of the isotopic composition of lead on the mass spectrometer], Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Ins p. 135-139, 1967.

265-209 **Golubev, A. A.** Izmereniye skorosti rasprostraneniya prodol'nykh voln na ne rishlifovannykh obraztsakh metodom gidroakusticheskogo kontakta [Measureme of the velocity of propagation of longitudinal waves in unsliced samples by t method of hydroacoustic contact]: Razved. Geofizika, no. 24, p. 30-33, illus., table, 1967.

66-170 **Golubitskiy, V. G.** K voprosu ob opredeleniya sobstvennogo perioda gorizontal'nykh mayatnikov s Tsel'nerovskom podvesom [On the problem of the determination of the natural period of horizontal pendulums with Zollner suspension (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 190-196, illus., table, 1967.

Golubkov, V. V. See *Vilenchik, A. M. 264-182*

Golubov, B. N. See *Velikov, E. Kh. 265-247*

65-005 **Gomberg, David N.; Banks, Philip O.; McBirney, Alexander R.** Guatemala—Preliminary zircon ages from Central Cordillera: Science, v. 162, no. 3849, p. 121-122, illus., table, 1968.

Gomes deAzevedo, Antonio Expedito. See *Duplessy, Claude. 275-278*

Goncharov, V. S. See *Ferronskiy, V. I. 265-599*

74-202 **Goncharskiy, V. N.; Kalashnikov, N. I.** Novyy metod kalibrovki izmeritel'noy apparatury v aeroelektrorazvedke metodom BDK [New method of calibrating the measuring apparatus in airborne electrical surveying by the infinitely long cable method], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 90-94, illus., 1965.

74-203 **Goncharskiy, V. N.** Izmeritel'naya apparatura po metodu BDK s zapis'yu na magnitnuyu lentu [Measuring apparatus for the infinitely long cable method with magnetic tape recording], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 95-100, illus., 1965.

67-342 **Gonfiantini, R.; Panichi, C.; Tongiorgi, E.** Isotopic disequilibrium in travertine deposition: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 55-58, illus., table, 1968.

Gonfiantini, R. See *Colombo, U. 266-410*

Gonfiantini, R. See *Ferrara, G. 267-360*

Gonfiantini, R. See *Ferrara, G. C. 267-361*

Gontar', V. T. See *Khalevin, N. I. 268-352*

Gontarenko, V. N. See *Tyapkin, K. F. 271-300*

Gontarenko, V. N. See *Tyapkin, K. F. 272-225*

Gontarenko, V. N. See *Tyapkin, K. F. 275-348*

Goodacre, A. K. See *Weber, J. R. 269-613*

Goodell, H. G. See *Holmes, Charles W. 264-009*

56-448 **Goodell, H. G.; Watkins, N. D.** The paleomagnetic stratigraphy of the Southern Ocean—20° West to 160° East longitude: Deep-Sea Research, v. 15, no. 1, p. 89-112, illus., table, 1968.

57-437 **Goodell, H. G.; Watkins, N. D.; Mather, T. T.; Koster, S.** The Antarctic glacial history recorded in sediments of the Southern Ocean, *in* Tertiary sea-level fluctuations (W. F. Tanner, editor): Palaeogeography, Palaeoclimatology, Palaeoecology, v. 5, no. 1, p. 41-62, illus., 1968.

Goodell, H. G. See *Martin, J. R. 271-004*

Goodell, H. Grant. See *Schnable, Jon E. 270-006*

Goodman, C. D. See *Lafleur, L. D. 268-031*

Goodman, R. E. See *Mahtab, M. A. 268-579*

Goodman, R. E. See *Mahtab, M. A. 274-444*

Goodwin, R. See *Moorbath, S. 264-007*

274-114 **Gopalakrishnan, B. S.** P wave velocities in the mantle below 700 km: Roya
tron. Soc. Geophys. Jour., v. 17, no. 4, p. 405-413, illus., table, 1969.

267-053 **Gopalan, K.; Wetherill, G. W.** Rubidium-strontium age of hypersthene (L) c
drites: Jour. Geophys. Research, v. 73, no. 22, p. 7133-7136, illus., table, 1968.

Gopalan, K. See *Venkatasubramanian, V. S. 275-008*

Gorai, M. See *Rikitake, T. 265-357*

268-214 **Gorai, Masao.** Some geological problems in the development of Japan an
neighboring island arcs, *in* The crust and upper mantle of the Pacific area—Inte
Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (
NRC Pub. 1687), p. 481-485, illus., 1968.

Gorbacheva, N. P. See *Mayorov, V. V. 270-392*

267-152 **Gorbatova, V. P.** Sposob opredeleniya koeffitsiyenta pogloshcheniya upr
voln na obraztsakh gornykh porod [A method of determining the coefficie
elastic wave absorption on rock samples]: Razved. Geofizika, no. 26, p. 110-1
lus., 1968.

Gorbenko, L. A. See *Koval'chuk, I. N. 267-640*

268-643 **Gorbivitskiy, G. B.** K voprosu o vybore pryemnika dlya skvazhinnogo p
akusticheskogo karotazha [On the problem of the choice of pickup for an ac
logging well instrument]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., n
p. 128-132, illus., tables, 1968.

267-635 **Gorbovitskiy, G. B.** O vybore priyemnika dlya skvazhinnogo p
akusticheskogo karotzaha [On the choice of pickup for an acoustic logging bo
instrument]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 8, p. 12
illus., 1968.

Gorbunov, V. F. See *Shimelevich, Yu. S. 272-561*

Gorbunov, V. F. See *Popov, N. V. 272-562*

264-134 **Gorbunova, I. V.** Zemletryaseniya Severnogo Tyan'-Shanya za 1962-19
[Earthquakes in the northern Tien Shan during 1962-64], *in* Zemletryaseniya v
v 1964 godu: Moscow, Akad. Nauk SSSR, p. 73-83, illus., tables, 1967.

265-170 **Gorbunova, I. V.** Zemletryaseniya Severnogo Tyan'-Shanya [Earthquakes
northern Tien Shan], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad.
SSSR Izv. Fizika Zemli, p. 71-76, illus., table, 1967.

Gorbushina, G. N. See *Besprozvannaya, A. S. 264-355*

Gorbushina, L. V. See *Adilov, V. B. 264-037*

Gordin, V. M. See *Aronov, V. I. 268-282*

266-370 **Gordiyenko, V. V.; Kutas, R. I.** Metodika izucheniya teplovykh svoystv go
porod i raschet velichiny teplovogo potoka Kryma [Procedure for studying th

mal properties of rocks and calculation of the value of heat flow in Crimea (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 61-72, illus., tables, 1968.

1-304 **Gordiyenko, V. V.; Kutas, R. I.** Teplove pole radyan'skykh Karpat ī susīdnykh terytorĩy [The thermal field of the Soviet Carpathians and adjacent territories (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B. no. 11, p. 996-998, table, 1968.

Gordon, David W. See *Herrin, Eugene. 265-105*

9-221 **Gordon, R. B.; Davis, L. A.** Reply [to comments on paper by R. B. Gordon and L. A. Davis, "Velocity and attenuation of seismic waves in imperfectly elastic rocks" (1968)]: Jour. Geophys. Research, v. 74, no. 2, p. 729-730, illus., 1969.

Gordon, Robert B. See *Aladag, Erdem. 275-039*

Gorelov, S. K. See *Britsyna, M. P. 269-319*

8-636 **Gorin, A.Z.; Dunchenko, I. A.** Vliyaniye zol'nosti ugley i sostava zoly na pokazaniya selektivnogo gamma-gamma-karotzaha [Effect of ash content of coals and composition of the ash on the readings of selective gamma-gamma logging]: Prikladnaya Geofizika, no. 53, p. 171-179, illus., tables, 1968.

3-152 **Gorkeladze, M. V.** Material dlya modeley plotin pri issledovanii seysmostoykosti [Material for dam models in investigations of earthquake resistance], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 13-18, tables, 1968.

Gor'kovoy, O. P. See *Butovskaya, Ye. M. 269-373*

Gornshteyn, D. K. See *Mokshantsev, K. B. 266-397*

Gorodentseva, I. A. See *Kolosov, A. L. 271-576*

-253 **Gorodetskaya, N. Ye.** Morfostruktura i neotektonika yuzo-zapada Zapadnoy-Sibirskoy ravniny [Morphostructure and neotectonics of the southwestern part of the West Siberian Lowland], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 207-212, illus., 1968.

Gorodnicheva, O. P. See *Abramov, Yu. M. 273-371*

-325 **Gorodnitskaya, V. A.; Demenitskaya, R. M.** Model' zemnoy kory [A model of the Earth's crust], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 47-63, illus., tables, 1968.

-210 Gorodnitskiy, A. N.; Kazanskiy, M. M.; Litvinov, E. M.; Trubyatchinskiy, N. N. Kompleks geofizicheskikh metodov issledovaniya okeanov i morey [A combination of geophysical methods of investigating the oceans and seas], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 195-200, 1968.

-200 **Gorodnitskiy, A. M.; Kazanskiy, M. M.; Litvinov, E. M.; Trubyatchinskiy, N. N.** O faktorakh, opredelyayushchikh strukturu yestestvennogo elektricheskogo polya vodnoy tolshchi po vertikali [On the factors determining the structure of the natural electrical field of the water layer along the vertical], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 136-141, illus., table, 1968.

-201 **Gorodnitskiy, A. M.** O vybore optimal'nogo registratora dlya morskoy elektrorazvedki [On the choice of optimal recorder for marine electrical exploration], *in*

Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningra Nauchno-Issled. Inst. Geologii Arktiki, p. 211-214, illus., 1968.

273-202 **Gorodnitskiy, A. M.; Seryakov, M. M.** Morskoye elektroprofilirovaniye v sever vostochnoy chasti Penzhinskoy guby (Okhotskoye more) [Marine electrical profili in the northeastern part of Penzhina Bay (Sea of Okhotsk)], *in* Geofizicheski metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. In Geologii Arktiki, p. 232-235, illus., 1968.

273-400 **Gorodnitskiy, A. M.; Ivanov, S. S.; Ushakov, S. A.** Nekotoryye rezul'ta gidromagnitnoy s''yemki na akvatorii Chernogo morya [Some results of a hydroma netic survey on the Black Sea water body], *in* Geofizicheskiye metody razvedki Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arkti p. 131-135, illus., 1968.

273-403 **Gorodnitskiy, A. M.; Ivanov, S. S.** Gidromagnitnaya s''yemka v tsentral'n chasti Baltiyskogo morya [Hydromagnetic survey in the central part of the Bal Sea], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leni grad, Nauchno-Issled. Inst. Geologii Arktiki, p. 249-251, 1968.

Gorodnitskiy, A. M. See *Konstantinov, V. P. 274-413*

265-071 **Gorokhov, I. M.; Kutyabin, E. P.** Faktory, vliyayushchiye na tochno opredeleniya rubidiya i strontsiya mass-spektrometricheskim metodom izotopno razbavleniya [Sources of error in isotope dilution analysis of rubidium and stron um], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. In p. 164-172, illus., 1967.

265-072 **Gorokhov, I. M.** Primeneniye graficheskikh metodov v Rb-Sr geokhronolo [Use of graphic methods in Rb-Sr geochronology], *in* Metodam opredeleniya solyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 19 Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 173-194, illus., 1967.

Goroshchenko, G. L. See *Tugarinov, A. I. 272-040*

268-144 **Gorshkov, G. P.** O prognoze zemletryaseniy [On earthquake predictio Moskov. Univ. Vestnik, ser. 4, no. 5, p. 25-34, 1968.

266-393 **Gorshkov, G. S.** Volcanic phenomena and the upper mantle, *in* Chemistry of Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 41-53 lus., 1967; Russian text, Yavleniya vulkanizma i verkhnyaya mantiya, *in* Khim zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

271-552 **Gorshkov, G. S.; Kirsanov, I. T.** Eruption of Piip crater (Kamchatka): Bull. V canol., v. 32, no. 1, p. 269-282, illus., 1968.

275-266 **Gorshkov, G. S.** Yavleniya vulkanizma i verkhnyaya mantiya [Phenomena of v canism and the upper mantle], *in* Khimiya Zemnoy Kory—Geokhimicheskaya k ferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vern skogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii 41-52, illus., 1964.

275-356 **Gorshkov, G. V.; Tsvetkov, O. S.** Neytronnoye izlucheniye prirodn obrazovaniy [Neutron radiation of natural formations], *in* Khimiya Zemnoy Kor Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhden akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Ge himii i Analit. Khimii, p. 409-423, illus., tables, 1963.

271-504 **Gorskiy, Ya. Ya.** Novyy sposob opredeleniya razreshayushchego vrem radiometricheskoy apparatury [New method of determining the revolving tim radiometric apparatus]: Geofiz. Apparatura, no. 31, p. 100-103, 1967.

267-123 **Goto, Hisao; Toki, Kenzo; Akiyoshi, Takashi.** Vibrational analysis of foundation structures with elliptic cross sections in elastic ground: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 1, p. 59-88, illus., 1968.

264-126 **Gotsadze, O. D.** K issledovaniyu Madatapskogo zemletryaseniya [On the investigation of the Madatap earthquake]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 85-95, illus., tables, 1968.

267-195 **Gott, Garland B.; Zablocki, Charles J.** Geochemical and geophysical anomalies in the western part of the Sheep Creek Range, Lander County, Nevada: U.S. Geol. Survey Circ. 595, 17 p., illus., table, 1968.

266-077 **Goudas, C. L.** The mechanical ellipticities of the Moon from Luna 10: Astron. Jour., v. 72, no. 8, p. 955-956, 1967.

268-089 **Goudas, C. L.** Lunar "mascons": Nature, v. 220, no. 5172, p. 1111-1112, 1968.

266-314 **Gougenheim, A.** Sur l'utilisation des différences de longitude pour la détermination du pole instantané [On utilization of the differences of longitude for determination of the instantaneous pole (with English abs.)], *in* Continental drift, secular motion of the pole, and rotation of the earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 95-97, illus., 1968.

272-340 **Gouin, Pierre; Mayaud, Pierre-Noël.** Contre-electrojet equatorial et nappes de courants Sq inverses [Equatorial contra-electrojet and inverse Sq current sheets]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 4, p. 357-360, illus., 1969.

Govorova, R. A. See *Arm, Ye. M. 264-582*

264-234 **Gow, Anthony J.; Ueda, Herbert T.; Garfield, Donald.** Antarctic ice sheet—Preliminary results of first core hole to bedrock: Science, v. 161, no. 3845, p. 1011-1013, illus., 1968.

270-203 **Gow, Anthony J.** Electrolytic conductivity of snow and glacier ice from Antarctica and Greenland: U.S. Army Materiel Command Cold Regions Research and Eng. Lab. Research Rept. 248, 8 p., illus., tables, 1968.

274-243 **Grady, A. E.; Rogers, J.** Experimental deformation of argillite—Production of kink folds at 450°C and 1 kilobar P_{water}: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1222-1229, illus., table, 1968.

264-312 **Graeser, S.** Lead isotopes and minor elements in galenas and sulphosalts from Binnatal: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 384-392, illus., tables, 1968.

Graeser, Stefan. See *Hoefs, Joachim. 264-304*

Grafe, A. See *Best, A. 272-328*

270-208 **Graindor, M.-J.** Les dislocations majeures du socle Armoricain [The major dislocations of the Armoricain basement], *in* Contribution de la carte gravimétrique à la géologie du Massif Armoricain: [France] Bur. Recherches Géol. et Minières Mem., no. 52, p. 25-42, 1967.

275-019 **Grais, Khairi I.** The effect of the number of charges carried by the argon ion on the darkening of Ilford Q_2 emulsion as ion detectors in mass-spectrometer: Pure and Appl. Geophysics, v. 74, p. 78-82, illus., 1969.

275-175 **Gramberg, I. S.; Sorokov, D. S.; Lazurkin, D. V.** Zadachi i napravleniya regional'nykh geologo-geofizicheskikh rabot na neft' i gaz v Arkticheskoy chasti Vostochnoy Sibiri na 1971-1980 gg. [Tasks and directions of regional geological and geophysical operations on oil and gas in the Arctic part of East Siberia in 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 27-30, 1969.

265-279 **Granar, Lars.** Application of the function sin (X)/X to solutions of two-dimensional geophysical problems: Geoexploration, v. 6, no. 1, p. 33-53, illus., tables 1968.

272-538 **Granberry, Raymond J.; Jenkins, Ralph E.; Bush, Darrell C.** Grain density value of cores from some Gulf Coast formations and their importance in formation evaluation, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans Houston, Tex., Soc. Prof. Well Log Analysts, p. N1-N19, illus., tables, 1968.

267-165 **Grandinetti, M.** Risultati di prove su modelli relative ad una nuova disposizion elettrodica per la ricerca di corpi di limitate dimensioni [Results of tests on model relative to a new electrode arrangement for investigation of bodies of limited dimensions (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 219 234, illus., 1968.

Granit, Y. Sh. See *Savarenskiy, Ye. F. 270-337*

Granit, Ya. Sh. See *Savarenskiy, Ye. F. 274-409*

269-612 **Grant, A. C.** Seismic-profiler investigation of the continental margin northeast o Newfoundland: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1187-1198, illus., 1968.

265-314 **Grant, F. S.** Two gravity profiles in the Manicouagan-Wabush area of west-central Québec: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 1, p. 895-906, illus., 1968.

Grantz, Arthur. See *Stanford Univ. School Earth Sci. 266-267*

Grässl, Steffen. See *Patzer, Ulrich. 274-438*

Grasty, R. L. See *Brown, P. E. 266-028*

272-023 **Grasty, R. L.; Rucklidge, J. C.; Elders, W. A.** New K-Ar age determinations o rocks from the east coast of Labrador: Canadian Jour. Earth Sci., v. 6, no. 2, p. 34 344, illus., table, 1969.

272-025 **Grauert, B.; Arnold, A.** Deutung diskordanter Zirkonalter der Silvrettadeck und des Gotthardmassivs (Schweizer Alpen) [Meaning of discordant zircon ages the Silvretta nappe and Gotthard massifs (Switzerland) (with English abs.)]: Cont Mineralogy and Petrology, v. 20, . 1, p. 34-56, illus., tables, 1968.

Gravelle, M. See *Boissonnas, J. 272-022*

269-465 **Gray, F.** Proton magnetometer surveys in the Solomon Islands and wester Pacific Ocean, 1958, *in* Reports on the geology, mineral occurrences, petroleum possibilities, volcanoes, and seismicity in the Solomon Islands: British Solomon Islan Geol. Rec., v. 2 (1959-62), p. 201-210, illus., 1965.

Gray, K. E. See *Podio, A. L. 269-665*

Gray, K. E. See *Seth, M. S. 274-146*

Gray, K. E. See *Podio-L., A. 274-445*

Gray, N. M. See *Doyle, H. A. 274-123*

Graziadei, B. See *Alessio, M. 265-018*

275-223 **Grearson, Lloyd S.** Discussion on "Quantitative evaluation of a stabilized pla form shipboard gravity meter" by T. R. LaFehr and L. L. Nettleton (Geophysic February, 1967, p. 110-118): Geophysics, v. 34, no. 3, p. 479, 1969.

Grebenshchikova, T. B. See *Khasanov, A. S. 266-374*

Green, D. C. See *Folinsbee, R. E. 268-213*

273-027 **Green, D. C.; Baadsgaard, H.; Cumming, G. L.** Geochronology of the Yellowknife area, Northwest Territories, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 725-735, illus., tables, 1968.

264-292 **Green, D. H.; Morgan, J. W.; Heier, K. S.** Thorium, uranium, and potassium abundances in peridotite inclusions and their host basalts: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 155-166, illus., tables, 1968.

267-317 **Green, D. H.** Origin of basaltic magmas, *in* Basalts—The Poldervaart treatise on rocks of basaltic composition, V. 2 (H. H. Hess and A. Poldervaart, editors): New York and London, Interscience Publishers, p. 835-862, tables, 1968.

Green, I. M. See *Greenstadt, E. W. 267-385*

Green, I. M. See *Fredricks, R. W. 269-396*

269-149 **Green, J.** Volcanological factors in the selection of the lunar base, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 53-74, illus., tables, 1968.

266-039 **Green, R.** The geomagnetic field and radiocarbon dates: Australian Jour. Sci., v. 31, no. 1, p. 42-43, 1968.

268-330 **Green, Trevor H.; Ringwood, A. E.** Genesis of the calc-alkaline igneous rock suite: Contr. Mineralogy and Petrology, v. 18, no. 2, p. 105-162, illus., tables, 1968.

268-331 **Green, Trevor H.; Ringwood, A. E.** Origin of garnet phenocrysts in calc-alkaline rocks: Contr. Mineralogy and Petrology, v. 18, no. 2, p. 163-174, illus., tables, 1968.

273-164 **Greenberg, Richard J.; Brace, W. F.** Archie's law for rocks modeled by simple networks: Jour. Geophys. Research, v. 74, no. 8, p. 2099-2102, illus., 1969.

Greenfield, R. J. See *Capon, J. 275-087*

272-254 **Greenfield, Roy J.; Sheppard, Robert M.** The Moho depth variations under the LASA and their effect on dT/dΔ measurements: Seismol. Soc. America Bull., v. 59, no. 1, p. 409-420, illus., table, 1969.

267-102 **Greensfelder, Roger.** Aftershocks of the Truckee, California, earthquake of September 12, 1966: Seismol. Soc. America Bull., v. 58, no. 5, p. 1607-1620, illus., tables, 1968.

267-385 **Greenstadt, E. W.; Green, I. M.; Colburn, D. S.** Earth's bow shock—Elapsed-time observations by two closely spaced satellites: Science, v. 162, no. 3856, p. 898-901, illus., table, 1968.

273-169 **Greenwood, J. Arthur; Nathan, Alan; Neumann, Gerhard; Pierson, Willard J.; Jackson, Frederick C.; Pease, Thomas E.** Radar altimetry from a spacecraft and its potential applications to geodesy: Remote Sensing Environment, v. 1, no. 1, p. 59-70, illus., table, 1969.

273-170 **Greenwood, J. Arthur; Nathan, Alan; Neumann, Gerhard; Pierson, Willard J.; Jackson, Frederick C.; Pease, Thomas E.** Oceanographic applications of radar altimetry from a spacecraft: Remote Sensing Environment, v. 1, no. 1, p. 71-80, illus., table, 1969.

271-162 **Gregerson, L. F.** The Dufour formula of longitude determination: Bull. Geod., no. 88, p. 144-146, 1968.

Gregory, A. R. See *Podio, A. L. 269-665*

Gregory, A. R. See *Podio-L., A. 274-445*

268-371 **Greifinger, Carl; Greifinger, Phyllis S.** Theory of hydromagnetic propagation in the ionosphere wave guide: Jour. Geophys. Research, v. 73, no. 23, p. 7473-7490, illus., tables, 1968.

Greifinger, Phyllis S. See *Greifinger, Carl 268-371*

Grekova, G. G. See *Pelyushchko, V. M. 275-238*

Grew, Gary W. See *Gurtler, C. A. 264-066*

272-009 **Grey, D. C.; Damon, P. E.; Haynes, C. V.; Long, Austin.** Carbon-isotope fractionation during wet oxidation of oxalic acid: Radiocarbon, v. 11, no. 1, p. 1-2, 1969.

272-070 **Greyber, Howard D.** Is Venus prolate,: Science, v. 163, no. 3874, p. 1469-1470, 1969.

Grieves, W. A. See *Levin, F. K. 264-198*

273-348 **Griffel, D. H.** Induced fields in the Moon: Planetary and Space Sci., v. 17, no. 4, p. 685-691, illus., 1969.

Griffin, Harry E. See *Turkevich, Anthony L. 275-076*

Griggs, D. T. See *Healy, J. H. 265-101*

Grigorenko, Yu. N. See *Tarasenko, T. V. 275-174*

Grigor'yeva, T. N. See *Nikolayeva, I. V. 274-027*

Grikurov, G. E. See *Ushakov, S. A. 275-210*

269-673 **Grim, Paul J.; Naugler, Frederic P.** Fossil deep-sea channel on the Aleutian abyssal plain: Science, v. 163, no. 3865, p. 383-386, illus., 1969.

271-377 **Grim, Paul J.; Erickson, Barrett H.** Fracture zones and magnetic anomalies south of the Aleutian Trench: Jour. Geophys. Research, v. 74, no. 6, p. 1488-1494, illus., 1969.

275-249 **Grim, Paul J.** Heat flow measurements in the Tasman Sea: Jour. Geophys Research, v. 74, no. 15, p. 3933-3934, illus., table, 1969.

Grim, Paul J. See *Erickson, Barrett H. 275-345*

268-566 **Grin', N. Ye.** Vrakhuvannya rozkhodzhen`ī dysypatyvnykh faktorīv pry analīz ī syntezī seysmīchnykh khvyl' (Akustychne nablyzhennya) [Allowance for divergence and dissipation factors in analyzing and synthesizing seismic waves (acousti approximation) (in Ukrainian with Russian and English summ.)] Akad. Nau Ukrayin. RSR Dopovīdī, ser. B, no. 8, p. 720-724, 1968.

271-533 **Grin', N. Ye.** Deyakī mozhlyvostī zastosuvannya rekurentnykh spīvvīdnoshen u metodī vīdbytykh khvyl' [Some possibilities of using recurrent relationships in th reflection method (with Russian and English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser . B, no. 7, p. 604-607, illus., 1968.

275-385 **Grin, N. Ye.; Zhilin, V. N.** Rekurrentnyye zavisimosti dlya summarnykh koeffitsiyentov otrazheniye ploskoy volny pri normal'nom padenii [Recurrence relation for the summary coefficients of reflection of a plane wave at normal incidence (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 5-11, illus., 1969.

Grin, V. P. See *Blinov, G. I. 269-206*

269-207 **Grin, V. P.; Duyshenaliyev, Sh.; Il'yasov, B.** K voprosu ob ispol'zovani osobennostey zatukhaniya seysmicheskikh voln slabykh zemletryaseniy pr seysmicheskom rayonirovanii [On the problem of the use of features of seismic wav

attenuation in weak earthquakes in seismic zoning], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 59-67, illus., table, 1967.

269-659 **Grin, V. P.; Lopatina, T. A.** Godografy pryamykh refragirovannykh voln po registratsii slabykh zemletryaseniy i vzryvov dlya rayona nizhnego techeniya reki Naryn [Traveltime curves of direct refringent waves according to records of weak earthquakes and explosions for the region of the lower course of the Naryn River], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 18-23, illus., table, 1967.

271-207 **Grinberg, G. A.; Mikshantsev, K. B.** Magmatizm i tektonicheskoye razvitiye severo-zapadnoy chasti Tikhookeanskogo poyasa [Magmatism and tectonic evolution of the northwestern part of the Pacific Ocean belt (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 86-87, 1968.

267-295 **Grindley, G. W.** Geology and structure of Waiotapu geothermal field, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 10-25, illus., table, 1963.

269-379 **Grinenko, L. N.; Grinenko, V. A.** Isotopic composition of sulphur in connection with problems of ore deposits genesis, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 79-88, illus., 1968.

Grinenko, V. A. See *Vinogradov, A. P. 266-413*

Grinenko, V. A. See *Grinenko, L. N. 269-379*

Grinenko, V. A. See *Vinogradov, A. P. 275-292*

269-385 **Grinenko, V. M.; Ivanov, M. V.; Lain, A. Yu.** Vliyaniye mikrobiologicheskikh protsessov na izotopnyy sostav sery nekotorykh mineralov zony okisleniya [Effect of microbiological processes on the isotopic composition of sulfur in some minerals from the oxidation zone]: Akad. Nauk SSSR Doklady, v. 183, no. 1, p. 192-195, illus., tables, 1968.

266-435 **Gringauz, K. I.** Issledovaniya plazmy vne magnetosfery [Investigations of plasma outside the magnetosphere]: Akad. Nauk SSSR Vestnik, no. 7, p. 27-32, illus., 1968.

272-313 **Gringauz, K. I.** Low-energy plasma in the Earth's magnetosphere, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 339-378, illus., table, 1969.

272-351 **Gringauz, K. I.** Issledovaniye plazmy vne magnitosfery Zemli pri pomoshchi kosmicheskikh apparatov [Investigation of plasma outside the Earth's magnetosphere using space apparatus]: Akad. Nauk SSSR Vestnik, no. 7, p. 27-32, illus., 1968.

272-378 **Griscom, Andrew; Bromery, Randolph W.** Geologic interpretation of aeromagnetic data for New England, Chap. 32 *in* Studies of Appalachian geology, northern and marine (Zen, E-an, and others, editors): New York and London, Interscience Publishers, p. 425-436, illus., 1968.

Grishayev, A. I. See *Vasin, V. S. 264-581*

264-517 **Grishin, M. P.; Pyatnitskiy, V. K.** Stroyeniye fundamenta Priyeniseyskoy chasti Zapadno-Sibirskoy plity i zapadnoy chasti Sibirskoy platformy po dannym geofiziki [Structure of the basement of the Yenisei part of the West Siberian plate and western part of the Siberian platform according to geophysical data]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 154-156, illus., 1964.

Gritsuk, V. P. See *Marderfel'd, B. Ye. 264-186*

275-051 **Grobman, W. D.; Blank, J. L.** Electrostatic potential distribution of the sunlit lunar surface: Jour. Geophys. Research, v. 74, no. 16, p. 3943-3951, illus., table, 1969.

Groegler, N. See *Balsiger, H. 267-054*

Grögler, N. See *Cahen, L. 274-014*

266-054 **Grögler, Norbert; Liener, A.** Cathodoluminescence and thermoluminescence observations of aubrites, Chap. 11.2 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 569-578, illus., tables, 1968.

Grögler, Norbert. See *Schmidt, Klaus. 268-021*

Grommé, C. S. See *Merrill, R. T. 273-373*

Gromova, L. I. See *Arslanov, Kh. A. 265-026*

Gromova, L. I. See *Arslanov, Kh. A. 267-042*

Grosmangin, Michel. See *Quint, Michel. 274-487*

Grossgeym, A. V. See *Mustafayev, K. A. 268-647*

265-603 **Grossling, B. F.** Efectos sīsmicos espurios debidos a irregularidades del manto glacial [Spurious seismic anomalies due to irregularities in glacial cover]: Minerales, v. 23, no. 102, p. 13-19, illus., 1968.

274-218 **Grossling, B. F.** Color mimicry in geology and geophysics: Geophysics, v. 34, no. 2, p. 249-254, 1969.

Grossman, J. J. See *Ryan, J. A. 266-061*

271-278 **Grossmann, W.** XIVème Assemblée Générale, Lucerne (Suisse)—Comptes rendus résumés des séances des sections—Sec. 4. Gravimétrie: mesure de la pesanteur [14th General Assembly, Lucerne, Switzerland—Summarized reports of the meetings of the sections—Sec. 4, Gravimetry; measurement of gravity]: Bull. Geod., no. 90, p. 421-425, 1968.

265-662 **Grosvenor, N. E.** Increasing interest shown in rock mechanics: Mining Eng., v. 20, no. 2, p. 85-87, illus., 1968.

Grotch, Stanley L. See *Turkevich, Anthony L. 275-076*

267-255 **Groten, E.; Reinhart, E.** Gravity prediction in mountainous areas [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 28-43, illus., tables, 1968.

267-259 **Groten, E.** On the masses necessary to produce the anomalous gravitational geopotential as obtained from satellite observations [with Italian summ.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 235-240, 1968.

271-275 **Groten, Erwin.** On the spherical harmonics series of the geopotential at the Earth's surface: Bull. Geod., no. 88, p. 227-239, illus., 1968.

273-121 **Grover, F. H.; Marshall, P. D.** Ground to air coupled waves from a distant earthquake: Nature, v. 220, no. 5168, p. 686-687, illus., 1968.

268-260 **Grover, J. C.** The British Solomon Islands—Some geological implications of the gravity data, 1966, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 296-306, illus., 1968.

269-201 **Grover, J. C.** Comments on the Chilean seismic seawave effects in the British Solomon Islands, 23-24 May 1960, *in* Reports on the geology, mineral occurrences, petroleum possibilities, volcanoes, and seismicity in the Solomon Islands: British Solomon Islands Geol. Rec., v. 2 (1959-62), p. 197-199, illus., 1965.

269-337 **Grover, J. C.** Gravity values in the Solomon Islands and plans for a gravity-magnetic-bathymetric survey of the region, *in* Reports on the geology, mineral occurrences, petroleum possibilities, volcanoes and seismicity in the Solomon Islands: British Solomon Islands Geol. Rec., v. 2, 1959-62, p. 199-200, illus., 1965.

Groza, A. A. See *Skopichenko, M. F. 275-156*

Grozdanov, L. See *Lilov, P. 268-028*

273-274 **Grozdilov, A. L.** Etapy razvitiya Zemli i matematicheskoye vyrazheniye ikh khronologii [Stages in the evolution of the Earth and the mathematical expression of its chronology], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 13, Matematicheskiye Metody v Geologii: Moscow, Izdatel'stvo "-Nauka," p. 60-61, 1968.

Grujic, N. See *Arsovski, M. 268-131*

Grunenfelder, M. See *Hanson, G. N. 272-017*

Grunenfelder, Marc. See *Schmidt, Klaus. 268-021*

264-176 **Gruntorád, Jan; Jůzek, Milan.** Metod kombinirovannogo sredinnogo gradiyenta [The method of combined mean gradient (with Czech summ.)]: Carolinae Univ. Acta, Geologica, no. 3, p. 261-270, illus., 1967.

266-215 **Gruntorád, Jan; Kenž, Jaroslav.** Die Ergebnisse der Messungen durch die Methode der induzierten Polarisation an manchen polymetallischen Lagerstätten des Böhmischen Massivs [The results of measurements by the induced polarization method on several polymetallic deposits of the Bohemian Massif (with Czech summ.)]: Carolinae Univ. Acta Geol., no. 4, p. 331-344, illus., 1967.

273-180 **Gruntorád, Jan; Ską́cel, Jaroslav.** Einige Ergebnisse der geophysikalischen Forschung der Zone von Sternberk-Horní Benęšov im Nízký Jeseník [Some results of geophysical investigation in the zone of Šternberk-Horní Benešov in Nízky Jeseník (with Czech summ.)]: Carolina Univ. Acta–Geologica 1968, no. 3, p. 237-252, illus., 1968.

273-181 **Gruntorád, Jan; Jûzek, Milan.** Die Modellmessungen durch die Methode des kombinierten mittleren Gradienten [Model measurements by means of the method of combining average gradients (with Czech summ.)]: Carolina Univ. Acta—Geologica 1968, no. 3, p. 253-268, illus., 1968.

265-332 **Grushinskiy, N. P.; Demenitskaya, R. M.; Karyakin, Ye. D.; Stroyev, P. A.; Ushakov, S. A.; Frolov, A. I.** Osnovnyye cherty stroyeniya Antarktidy po gravimetricheskim dannym [Main features of the structure of Antarctica from gravimetric data], *in* Osnovnyy itogi izucheniya Antarktiki az 10 let—Vses. Soveshchaniye po Izucheniyu Antarktiki, Moscow, 1966, Doklady: Moscow, Izdatel'stvo "Nauka," p. 97-108, illus., 1967.

272-223 **Grushinskiy, N. P.; Sazhina, N. B.** Ob anomaliyakh Buge na okeanakh [On Bouguer anomalies in the oceans]: Akad. Nauk SSSR Doklady, v. 184, no. 2, p. 331-333, 1969.

267-264 **Gubanenko, L. A.; Koz'yakova, K. Ya.** Etalonirovaniye strunnykh gravimetrov metodom naklona [Calibrating string gravimeters by the tilt method]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 91-94, illus., tables, 1968.

267-263 **Gubarenko, L. A.; Staklo, A. V.** Opredeleniye tseny deleniya shkaly strunnogo gravimetra raschetnym sposobom [Determination of the scale division of a string gravimeter by a calculating method]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 88-90, illus., 1968.

Guberman, Sh. A. See *Vayntsvayg, M. N. 269-703*

266-123 **Gubin, Igor E.** Earthquakes and seismic zoning: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 107-126, illus., 1967.

270-529 **Gubin, Yu. A.; Semenov, Ye. V.** Trebovaniya k stabil'nosti elementov elektronnoy skhemy skvazhinnykh priborov [Stability requirements of the elements of the electronic scheme of borehole instruments]: Geofiz. Apparatura, no. 36, p. 146-153, illus., table, 1968.

Gudenko, V. V. See *Semin, Yu. A. 275-378*

Gudkov, A. A. See *Mokshantsev, K. B. 266-397*

265-095 **Guest, J. E.; Fielder, G.** Lunar ring structures and the nature of the maria: Planetary and Space Sci., v. 16, no. 5, p. 665-673, illus., table, 1968.

Guest, J. E. See *Fielder, G. 268-053*

Guest, J. E. See *Fielder, G. 268-063*

271-045 **Guest, J. E.; Murray, J. B.** Nature and origin of Tsiolkovsky Crater, lunar farside: Planetary and Space Sci., v. 17, no. 1, p. 121-141, illus., 1969.

264-301 **Guha, S. K.** Crustal features in Bay of Bengal and Arabian Sea region, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 116-127, illus., 1966.

Guillier, Marie-Thérèse. See *Labeyrie, Jacques. 272-520*

267-022 **Guimarães, Djalma.** Idade de duas rochas do sul de Minas Gerais [Age of two rocks from southern Minas Gerais]: [Brazil] Div. Geologia e Mineralogia Notas Prelim. e Estudos, no. 137, 7 p., tables, 1967.

267-023 **Guimarães, Djalma.** O nôvo método de determinação de idade absoluta [On a new method of determination of absolute age (with English version)]: [Brazil] Div. Geologia e Mineralogia Bol., no. 240, 26 p., illus., tables, 1967.

274-007 **Guimarães, Djalma.** Os metamorfitos denominados "Micaxistos Serido" [The metamorphics called "Serido Micaschists"]: [Brazil] Div. Geologia e Mineralogia Bol., no. 237, 31 p., illus., tables, 1966.

Guinot, B. See *Markowitz, William. 266-299*

266-308 **Guinot, Bernard; Feissel, Martine.** Nouvelles méthodes de calcul du Bureau International de l'Heure [New methods of calculation for the International Bureau of Time (with English abs.)], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 63-70, illus., table, 1968.

275-031 **Gukasyan, R. Kh.; Meliksteyan, B. M.** Ob absolyutnom vozraste i zakonomernostyakh formirovaniya slozhnogo Merginskogo plutona [On the absolute age and regularities of formation of the complex Merginsk pluton]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, nos. 3-4, p. 8-26, and no. 5, p. 19-38, illus., tables, 1965.

Gulevskiy, V. I. See *Solov'yev, S. L. 265-174*

269-704 **Gulin, Yu. A.** Effektivnost' opredeleniy poristosti peschano-glinistykh otlozheniy po rezul'tatam gamma-gamma- i neytronnogo karotazha v komplekse s GK i PS [Effectiveness of determination of the porosity of sandy-shaly formations from the results of gamma-gamma and neutron logging in combination with gamma and SP logging]: Neftegazovaya Geologiya i Geofizika, no. 9, p. 23-28, illus., 1968.

Gulin, Yu. A. See *Komarov, S. G. 273-507*

Gulyayev, A. P. See *Puchkov, Ye. V. 274-280*

Gulyayev, P. V. See *Volovov, V. I. 268-610*

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Gunn, J. E. See *Norton, R. H. 268-087*

Gunst, Robert H. See *McDonald, Keith L. 275-310*

273-353 **Gupta, B. R. D.** Geomagnetic bays at the Indian stations of Alibag, Annamalainagar and Trivandrum: [India] Natl. Geophys. Research Inst. Bull., v. 6, no. 2, p. 69-77, illus., 1968.

Gupta, Chandra P. See *Negi, Janardan G. 271-125*

264-282 **Gupta, H. K.** Thermal conductivity of sedimentary rocks, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 171-182, illus., tables, 1966.

264-109 **Gupta, Harsh; Sato, Yasuo.** Regional characteristics of Love wave group velocity dispersion in Eurasia [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 1, p. 41-52, illus., tables, 1968.

Gupta, Harsh. See *Narayan, Hari. 271-068*

275-090 **Gupta, Harsh; Narain, Hari; Rastogi, B. K.; Mohan, Indra.** A study of the Koyna earthquake of December 10, 1967: Seismol. Soc. America Bull., v. 59, no. 3, p. 1149-1162, illus., tables, 1969.

271-070 **Gupta, I. N.** P-wave radiation patterns from elementary sources within a fluid half space: Indian Geophys. Union Jour., v. 4, no. 2, p. 55-60, illus., 1967.

270-263 **Gupta, Jagdish C.; Chapman, Sydney.** Lunar daily harmonic geomagnetic variation as indicated by spectral analysis: Jour. Atmos. and Terrest. Physics, v. 31, no. 2, p. 233-252, illus., tables, 1969.

Gupta, Jagdish Chandra. See *Chapman, Sydney. 274-325*

264-425 **Gupta Sarma, D.; Datta, S.** An automatic compensator for magnetic field fluctuations, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 108-115, illus., 1966.

Gupta, Yugal. See *Overton, Harold L. 273-501*

265-139 **Gupte, R. B.** The Koyna earthquake: Geol. Soc. India Bull., v. 5, no. 2, p. 37-41, illus., 1968.

268-141 **Gupte, R. B.** The Koyna earthquake: Geol. Soc. India Jour., v. 9, no. 1, p. 97-105 tables, 1968.

265-449 **Gurariy, G. Z.; Trubikhin, V. M.** Rezul'taty paleomagnitnykh issledovaniy verkhnekembriyskikh krasnotsvetov Irkutskogo amfiteatra [Results of paleomagnetic investigations on the Upper Cambrian red beds of the Irkutsk amphitheater] Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 86-92, illus., tables, 1968.

275-343 **Gurariy, G. Z.** Paleomagnitnyye issledovaniya verkhnekembriyskikh krasnotsvetnykh otlozheniy srednego techeniya r. Angary [Paleomagnetic investigations the Upper Cambrian red beds of the middle course of the Angara River]: Akad Nauk SSSR Izv. Ser. Geol., no. 6, p. 69-74, illus., table, 1969.

Gurevich, B. N. See *Savinskiy, K. A. 275-176*

Gurevich, G. S. See *Rodnikova, R. D. 265-273*

Gurov, V. N. See *Borodin, B. P. 265-646*

264-066 **Gurtler, C. A.; Grew, Gary W.** Meteoroid hazard near Moon: Science, v. 161 no. 3840, p. 462-464, illus., table, 1968.

Gusakov, N. D. See *Aleksandrov, B. L. 265-649*

273-390 **Gusev, B. V.** Perekhodnaya paleomagnitnaya zona v bazitakh kogotokskoy svit na severe Sibirskoy platformy [A transitional paleomagnetic zone in the mafic rock of the Kogotok suite in the north of the Siberian platform], *in* Geofizicheskiy metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Ins Geologii Arktiki, p. 64-71, illus., tables, 1968.

Gusev, G. S. See *Mokshantsev, K. B. 266-397*

267-374 **Guseva, A. N.; Fayngersh, L. A.** Ob izotopnom sostave sery gipergennogo izmenennykh neftey [On the isotopic composition of sulfur of hypergene altered oils Neftegazovaya Geologiya i Geofizika, no. 9, p. 46-49, illus., tables, 1968.

Guseynov, Kh. F. See *Kasimzade, M. S. 266-520*

Gushchin, N. V. See *Gaponenko, G. I. 273-302*

267-599 **Gussow, William Carruthers.** Salt diapirism—Importance of temperature, a energy source of emplacement, *in* Diapirism and diapirs—A symposium: Am. Asso Petroleum Geologists Mem. 8, p. 16-52, illus., table, 1968.

271-319 **Guterch, Aleksander; Jankowski, Jerzy; Teisseyre, Roman; Uchman, Ja** Badanie głębokiej struktury skorupy i gornego płaszcza Ziemi [Research on the dee structure of the Earth's crust and upper mantle (with English and Russian abs.]: Przegląd Geol., v. 16, no. 11(187), p. 517-524, 1968.

Guterman, V. G. See *Lazarenko, M. A. 271-256*

271-257 **Guterman, V. G.** Pro mozhlyvist' peretīkannya rechovyny verkhn'oyi mantī vnaslīdok vynyknennya vohnyshch polīmorfnykh chy īnshīkh perekhodīv [On th possibility of flow of upper mantle matter as a result of the formation of focuses polymorphic or other transitions (with English and Russian summ.)]: Akad. Nau Ukrayin. RSR Dopovīdī, ser. B, no. 5, p. 429-430, illus., 1968.

271-259 **Guterman, V. G.** Peremīshchennya v pruzhnīy modelī verkhn'oyi mantīyi Zem vnaslīdok īsnuvannya dvokh vohnyshch peretvorennya rechovyny [Displacemen in an elastic model of the upper mantle of the Earth due to the existence of tw focuses of transformation of matter (with English and Russian summ.)]: Akad. Na Ukrayin. RSR Dopovīdī, ser. B, no. 6, p. 524-526, illus., 1968.

273-153 **Gutidze, P. A.** K issledovaniyu voprosov seysmostoykosti arochnoy plotiny na modeli [On the investigation of problems of earthquake resistance of an arch dam on models], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 19-27, illus., 1968.

Gutorov, Yu. A. See *Vedekhin, A. F. 272-565*

270-459 **Guyod, Hubert.** Examples of current distribution about Laterolog sondes: Log Analyst, v. 7, no. 1, p. 27-32, illus., 1966.

267-230 **Gzovskiy, M. V.; Nikonov, A. A.** Kolichestvennyye kharakteristiki sovremennykh i molodykh tektonicheskikh dvizheniy v oblastyakh s raznymi tektonicheskimi rezhimom i seysmichnost'yu [Quantitative characteristics of recent and young tectonic movements in regions with different tectonic regime and seismicity]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 17-33, illus., table, 1968.

272-077 **Haag, Robert M.** The lithosphere—The solid state of matter, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 119-123, 1968.

Haak, V. See *Sengpiel, K. P. 265-225*

Haas, Robert S. See *Fain, Gilbert. 272-493*

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Haddon, R. A. W. See *Bullen, K. E. 274-287*

275-131 **Haddon, R. A. W.; Bullen, K. E.** An Earth model incorporating free Earth oscillation data: Physics Earth and Planetary Interiors, v. 2, no. 1, p 35-49, illus., tables, 1969.

267-135 **Hade, G.; Conner, M.; Kuo, J. T.** Laser interferometer calibration system for extensometers: Seismol. Soc. America Bull., v. 58, no. 5, p. 1379-1383, illus., 1968.

273-499 **Hadikusumo, Djajadi.** Kelut Volcano and its problems: Bandung Inst. Technology Dept. Geology Contr., no. 66, p. 43-52, illus., table, 1968.

266-095 **Hadsell, F. A.** History of earthquake activity in Colorado, *in* Geophysical and geological studies of the relationships between the Denver earthquake and the Rocky Mountain Arsenal well, Pt. A: Colorado School Mines Quart., v. 63, no. 1, p. 57-72, illus., tables, 1968.

274-116 **Hadsell, F. A.** Earthquake activity in Colorado: Mines Mag., v. 58, no. 6, p. 20-27, illus., table, 1968.

Hadžievski, D. See *Roustanovitch, D. N. 268-132*

273-284 **Haefeli, R.; Brandenberger, F.; Gfeller, P.** Rheologisch-glaziologische Untersuchungen im Firngebiet des grönländischen Inlandeises [Rheologic-glaciologic investigations in the firn region of the Greenland inland ice (with English abs.)]: Medd. Grönland, v. 177, no. 1, 340 p., illus., tables, 1968.

272-087 **Haffner, H.** Zur Morphologie des Mondes nach Lunar Orbiter V [On the morphology of the Moon according to Lunar Orbiter 5]: Naturwissenschaften, v. 56, no. 2, p. 49-56, illus., 1969.

Hagemann, R. See *Lorius, C. 264-308*

Hagemeyer, W. A. See *Lucas, J. W. 267-079*

Hagemeyer, W. A. See *Vitkus, G. 268-081*

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Hagiwara, Takahiro. See *Kayano, Ichiro. 264-115*

266-133 **Hagiwara, Takahiro; Iwata, Takayuki.** Summary of the seismographic observation of Matsushiro swarm earthquakes [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 485-515, illus., tables, 1968.

264-256 **Hagiwara, Yukio.** Analyses of gravity values in Japan [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 1092-1228, illus., tables, 1967.

Hagiwara, Yukio. See *Rikitake, Tsuneji. 264-351*

Hahn, A. See *Bosum, W. 265-464*

265-280 **Hahn, Albrecht.** Neue Entwicklungen auf dem Gebiet der Geophysik und der Anwendung mathematischer Methoden in der Erdolgeologie [New developments in the field of geophysics and the application of mathematical methods in petroleum geology (with English summ.)]: Erdol. u. Kohle, v. 21, no. 6, p. 317-323, illus., 1968.

273-382 **Hahn, Albrecht; Siemens, Günter; Ulrich, Hans Jürgen.** Lagerungsbestimmungen an Bohrkernen aus Sedimenten des Devons durch paläomagnetische Messungen [Attitude determinations on drill cores from sediments in the Devonian by means of paleomagnetic measurements]: Geol. Jahrb., v. 85, p. 743-754, illus., table, 1968.

Hahn-Weinheimer, P. See *Alsopp, H. L. 272-257*

270-014 **Haile, N. S.; Ayob, Mohammed Bin.** Note on radiometric age determination of samples of peat and wood from the tin-bearing Quaternary deposits at Sungei Besi tin mines, Kuala Lumpur, Selangor, Malaysia: Geol. Mag., v. 105, no. 6, p. 519-520, 1968.

Haines, G. V. See *Serson, P. H. 266-485*

269-461 **Haines, G. V.** Polynomial estimation of certain geomagnetic quantities applied to a survey of Scandinavia [with French abs.]: Dominion Observatory Ottawa Pubs., v. 37, no. 4, p. 79-112, illus., tables, 1968.

Hajnal, Zoltan. See *Hall, Donald H. 272-256*

269-118 **Halajian, J. D.** Albedo and photometry of Surveyor footprints: Planetary and Space Sci., v. 16, no. 12, p. 1465-1474, illus., table, 1968.

275-058 **Halajian, J. D.; Reichman, J.** Correlation of mechanical and thermal properties of the lunar surface: Icarus, v. 10, no. 2, p. 179-196, illus., 1969.

267-086 **Halajian, John D.** Mechanical, optical, thermal, and electrical properties of the Surveyor I landing site, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 81-108, illus., 1967.

274-220 **Halbouty, Michel T.** Needed—Greater teamwork between disciplines: Jour. Petroleum Technology, v. 20, no. 6, p. 555-558, 1968.

Halenka, J. See *Bednarova-Novakova, B. 275-307*

Halenka, Jaroslav. See *Bednarova-Novakova, Bohumila. 267-397*

272-345 **Halenka, Jaroslav.** On correlating "cosmic" flares with geomagnetic storms [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sbornīk 1967, v. 15, p. 367-386, illus., tables, 1968.

269-189 **Hales, A. L.; Cleary, J. R.; Roberts, J. L.** Velocity distribution in the lower mantle: Seismol. Soc. America Bull., v. 58, no. 6, p. 1975-1989, illus., tables, 1968.

270-240 **Hales, A. L.; Bloch, S.** Upper mantle structure—Are the low velocity layers thin,: Nature, v. 221, no. 5184, p. 930-933, illus., 1969.

Hales, Anton L. See *Cleary, John. 264-158*

269-460 **Hall, Donald H.** Regional magnetic anomalies, magnetic units, and crustal structure in the Kenora District of Ontario: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1277-1296, illus., table, 1968.

272-256 **Hall, Donald H.; Hajnal, Zoltan.** Crustal structure of northwestern Ontario—Refraction seismology: Canadian Jour. Earth Sci., v. 6, no. 1, p. 81-99, illus., tables, 1969.

Hall, Donald H. See *McGrath, Peter H. 272-381*

272-382 **Hall, Donald H.** A magnetic interpretation method for calculating body parameters for buried sloping steps and thick sheets: Geoexploration, v. 6, no. 4, p. 187-206, illus., 1968.

Hall, J. McG. See *Robinson, W. B. 268-439*

274-227 **Halmos, F.** Die Fehlerverteilung der Funktsionswerte im allgemeinen Fall [Error distribution of the function value in the general case (with English and Russian summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 187-193, 1967.

272-244 **Halousek, J.; Přihoda, K.** Gerätetechnik geothermischer Messungen und das neue tschechoslowakische Geothermometer GT-1 [Instrument technology of geothermal measurements and the new Czechoslovakian geothermometer GT-1]: Freiberger Forschungshefte C 238, p. 121-129, illus., tables, 1968.

272-230 **Halousek, Jan; Přihoda, Karel.** A precise thermistor thermometer for use in geothermics [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sbornīk 1967, v. 15, p. 321-335, illus., table, 1968.

270-007 **Halpern, M.** Ages of Antarctic and Argentine rocks bearing on continental drift: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 159-167, illus., tables, 1969.

Halvorsen, E. See *Storetvedt, K. M. 265-439*

Halvorsen, E. See *Storetvedt, K. M. 266-463*

266-129 **Hamada, Kazuo.** Ultra micro-earthquakes in the area around Matsushiro [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 271-318, illus., table, 1968.

Hamada, Tatsuji. See *Yamasaki, Fumio. 265-016*

273-045 **Hamaguchi, H.; Onuma, N.; Hirao, Y.; Yokoyama, H.; Bando, S.; Furukawa, M.** The abundances of arsenic, tin and antimony in chondritic meteorites: Geochim. et Cosmochim. Acta, v. 33, no. 4, p. 507-518, illus., table, 1969.

Hamaguchi, Hiroyuki. See *Hashizume, Michio. 272-269*

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Hämäläinen, U. See *Puranen, M. 268-436*

Hamet, Jean. See *Allegre, Claude Jean. 266-032*

267-011 **Hamilton, E. I.; Farquhar, R. M.** (editors). Radiometric dating for geologist
London and New York, Interscience Publishers, 506 p., illus., tables, 1968.

267-347 **Hamilton, E. I.** The isotopic composition of strontium applied to the problems
the origin of alkaline rocks, *in* Radiometric dating for geologists (E. I. Hamilton an
R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 43
463, illus., tables, 1968.

265-052 **Hamilton, Eric I.** Prikladnaya geokhronologiya, s glavoy sravitel'noy geokhim
L. Kh. Arensa [Applied geochronology, with a chapter on comparative geochemist
by L. H. Ahrens]: Leningrad, Izdatel'stvo "Nedra," 256 p., illus., tables, 1968.

Hamilton, N. See *Dyer, K. R. 272-495*

271-048 **Hamilton, R. M.; Gale, A. W.** Thickness of the mantle seismic zone beneath th
North Island of New Zealand: Jour. Geophys. Research, v. 74, no. 6, p. 1608-161
illus., table, 1969.

274-126 **Hamilton, R. M.; Evison, F. F.** Reply to R. P. Suggate's letter [Seismicity ar
structure in south-west New Zealand and the Macquarie Ridge]: New Zealand Jou
Geology and Geophysics, v. 11, no. 5, p. 1277, 1968.

266-289 **Hamilton, Warren B.; Myers, W. Bradley.** Cenozoic tectonic relationshi
between the western United States and the Pacific basin, *in* Conference on geolog
problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Uni
Pubs. Geol. Sci., v. 11, p. 342-357, illus., 1968.

274-484 **Hammack, Gregory W.** Log analyses using the time share computer system,
SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Housto
Tex., Soc. Prof. Well Log Analysts, p. R1-R21, illus., tables, 1969.

Hammond, Willis T. See *Hilde, Thomas W. C. 273-487*

Han, Dae Rim. See *Lee, Dang Hoon. 274-183*

272-056 **Han, Jerry; Simoneit, Bernd R.; Burlingame, A. L.; Calvin, Melvin.** Organic an
ysis on the Pueblito de Allende meteorite: Nature, v. 222, no. 5191, p. 364-365,
lus., 1969.

Han, Mark C. See *Ralph, Elizabeth K. 266-022*

265-077 **Hanappe, F.; Vosters, M.; Picciotto, E.; Deutsch, S.** Chimie des neiges anta
tiques et taux de deposition de matière extraterrestre-deuxieme article [Chemistry
antarctic snows and the rate of deposition of extraterrestrial material, (Pt.) 2]: Ea
and Planetary Sci. Letters, v. 4, no. 6, p. 487-496, tables, 1968.

266-295 **Hancock, P. L.** Joints and faults—The morphological aspects of their origi
Geologists' Assoc. Proc., v. 79, pt. 2, p. 141-151, 1968.

Haneman, F. See *Ewen, H. I. 270-100*

275-252 **Hanks, Thomas C.; Anderson, Don L.** The early thermal history of the Ea
Physics Earth and Planetary Interiors, v. 2, no. 1, p. 19-29, illus., tables, 1969.

Hannaford, W. See *Serson, P. H. 266-485*

265-672 **Hansen, Harry J., 3d.** Geophysical log cross-section network of the Cretaceous sediments of southern Maryland: Maryland Geol. Survey Rept. Inv. 7, 46 p., illus., tables, 1968.

264-026 **Hansen, Henry P.** Chronology of postglacial pollen profiles in the Pacific Northwest (U. S. A.), *in* Quaternary palynology and actuopalynology: Rev. Palaeobotany and Palynology, v. 4, nos. 1-4, p. 103-105, table, 1967.

266-064 **Hansen, James E.; Cheyney, Howard.** Comments on the paper by D. G. Rea and B. T. O'Leary, "On the composition of the Venus clouds" [1968]: Jour. Geophys. Research, v. 73, no. 18, p. 6136-6137, table, 1968.

268-527 **Hansen, John.** A study of radioactive veins containing rare-earth minerals in the area surrounding the Ilimaussaq alkaline intrusion in South Greenland [with Russian abs.]: Medd. om Grönland, v. 181, no. 8, 47 p., illus., tables, 1968; *reprinted as* Grönlands Geol. Undersögelse Bull. 76, 1968.

Hansen, W. M. See *Ryan, J. A. 266-061*

264-004 **Hansen, Wallace R.; Peterman, Zell E.** Basement-rock geochronology of the Black Canyon of the Gunnison, Colorado: U.S. Geol. Survey Prof. Paper 600-C, p. C80-C90, illus.,tables, 1968.

Hanser, Frederick A. See *Vancour, Roger P. 264-323*

272-017 **Hanson, G. N.; Grunenfelder, M.; Soptrayanova, G.** The geochronology of a recrystallized tectonite in Switzerland—The Roffna Gneiss: Earth and Planetary Sci. Letters, v. 5, no. 6, p. 413-422, illus., tables, 1969.

267-573 **Hanson, Kenneth; Berg, Eduard; Gedney, Larry.** A seismic refraction profile and crustal structure in central interior Alaska: Seismol. Soc. America Bull., v. 58, no. 5, p. 1657-1665, illus., tables, 1968.

66-461 **Hanuš, Václav.** Applicability of palaeomagnetism of pyrrhotite to ore-genetic studies [with German abs.]: Mineralium Deposita, v. 3, no. 3, p. 242-248, illus., tables, 1968.

Hapke, Bruce W. See *Cohen, Alvin J. 265-090*

73-485 **Hara, Ikuo; Uchibayashi, Seiji; Yokota, Yuji; Umemura, Hayao; Oda, Masanobu.** Geometry and internal structures of flexural folds—[Pt.] 1, Folding of a single competent layer enclosed in thick incompetent layer: Hiroshima Univ. Jour. Sci., ser. C, v. 6, no. 1, p. 51-113, illus., tables, 1968.

72-119 **Harada, Takehisa.** Precise readjustment of old and new first order triangulations, and the result in relation with destructive earthquakes in Japan [with German abs.]: Japan Geog. Survey Inst. Bull., v. 12, pts. 3-4, p. 5-64, illus., tables, 1967.

Harakal, J. E. See *White, William H. 275-011*

Haramura, H. See *Forbes, Robert B. 270-435*

64-350 **Harang, L.** VLF-emissions observed at stations close to the auroral zone and at stations on lower latitudes: Jour. Atmos. and Terrest. Physics, v. 30, no. 6, p. 1143-1160, illus., table, 1968.

68-012 **Harbaugh, John W.** Radiometric age dating, Chap. 6 *in* Stratigraphy and geologic time: Dubuque, Iowa, William C. Brown Co., Publishers, p. 76-109, illus., tables, 1968.

64-477 **Harbison, R. N.** Geology of De Soto canyon: Jour. Geophys. Research, v. 73, no. 16, p. 5175-5185, illus., 1968.

274-094 **Harding, Samuel T.; Algermissen, S. T.** Focal mechanism of the Prince William Sound, Alaska earthquake of March 28, 1964: Seismol. Soc. America Bull., v. 59, no. 2, p. 799-811, illus., tables, 1969.

270-271 **Hargraves, R. B.** Paleomagnetism of the Roraima dolerites: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 147-160, illus., tables, 1968.

271-362 **Hargraves, R. B.; Shagam, R.** Paleomagnetic study of La Quinta Formation, Venezuela: Am. Assoc. Petroleum Geologists Bull., v. 53, no. 3, p. 537-552, illus., tables, 1969.

274-356 **Hargraves, R. B.; Perkins, W. E.** Investigations of the effect of shock on natural remanent magnetization: Jour. Geophys. Research, v. 74, no. 10, p. 2576-2589, illus., tables, 1969.

Harian, A. M. See *Fox, P. J. 267-604*

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265-290 **Harland, W. B.** A hypothesis of continental drift tested against the history of Greenland and Spitsbergen: Cambridge Research [v. 1], no. 2, p. 18-22, illus., 1966.

Harp, G. D. See *Schell, W. R. 269-030*

Harre, W. See *Brooks, C. 268-001*

273-038 **Harre, W.; Kockel, F.; Kreuzer, H.; Lenz, H.; Müller, P.; Walther, H. W.** Über Rejuvenationen im Serbo-Madzedonische Massiv (Deutung radiometrischer Altersbestimmungen) [On rejuvenations in the Serbo-Macedonian massif (Interpretation of radiometric age determinations)], *in* Internat. Geol. Cong., 23d, Prague, 1968 Proc., Sec. 6, Geochemistry: Prague, Academia, p. 223-236, illus., tables, 1968.

Harris, D. H. See *Hartmann, W. K. 268-068*

Harris, M. H. See *Gardner, G. H. F. 272-537*

Harrison, C. G. A. See *Luyendyk, Bruce P. 266-484*

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Harrison, C. G. A. See *Ball, M. M. 274-236*

264-537 **Harrison, W.; Richardson, A. M., Jr.** Plate-load tests on sandy marine sediments lower Chesapeake Bay, *in* Marine geotechnique—Internat. Research Conf., Monticello, Ill., 1966, Proc.: Urbana, Ill., Univ. Illinois Press, p. 274-290, illus., tables 1967.

Harsenhorst, Z. de Velde. See *Hugo, P. J. 267-567*

Hart, Pembroke J. See *Knopoff, Leon. 268-308*

Hart, S. R. See *Davis, G. L. 267-005*

267-013 **Hart, S. R.; Davis, G. L.; Steiger, R. H.; Tilton, G. R.** A comparison of the isotopic mineral age variations and petrologic changes induced by contact metamorphism *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors) London and New York, Interscience Publishers, p. 73-110, illus., tables, 1968.

272-012 **Hart, S. R.; Davis, G. L.** Zircon U-Pb and whole-rock Rb-Sr ages and earl crustal development near Rainy Lake, Ontario: Geol. Soc. America Bull., v. 80, no 4, p. 595-616, illus., tables, 1969.

Hart, S. R. See *Steinhart, J. S. 273-306*

265-211 **Harthill, Norman.** The CSM test area for electrical surveying methods: Geophysics, v. 33, no. 4, p. 675-678, illus., 1968.

268-065 **Hartmann, W. K.; Yale, F. G.** Lunar crater counts—[Pt.] 4, Mare Orientale and its basin system: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 117, p. 131-137, illus., 1968.

268-068 **Hartmann, W. K.; Harris, D. H.** Lunar volcanic eruptions near Aristarchus: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 121, p. 161-167, illus., 1968.

264-084 **Hartmann, William K.** Craters—A tale of three planets: Nat. History, v. 77, no. 5, p. 59-63, illus., 1968.

268-064 **Hartmann, William K.** Lunar crater counts—[Pt.] 3, Post mare and "Archimedian" variations: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 116, p. 125-129, illus., 1968.

268-066 **Hartmann, William K.** Lunar crater counts—[Pt.] 5, Latitude independence and sources of impacting bodies: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 118, p. 139-144, illus., 1968.

268-075 **Hartmann, William K.; Yale, Francis G.** Mare Orientale and its intriguing basin: Sky and Telescope, v. 37, no. 1, p. 4-7, illus., 1969.

269-130 **Hartmann, William K.** Lunar crater counts—[Pt.] 6, The young craters Tycho, Aristarchus, and Copernicus: Arizona Univ. Lunar and Planetary Lab. Commun., v. 7, no. 119, p. 145-156, illus., 1968.

275-060 **Hartmann, William K.** Terrestrial, lunar, and interplanetary rock fragmentation: Icarus, v. 10, no. 2, p. 201-213, illus., 1969.

Harward, Moyle E. See *Theisen, Arthur A. 265-594*

Harwood, T. A. See *Poulin, Ambrose O. 265-218*

271-327 **Harzer, D.** Sauerstoffisotopenuntersuchungen an varistischen und postvaristischen Lagerstätten Sachsens [Oxygen isotope investigations on Variscan and post-Variscan deposits of Saxony (with discussion)]: Freiberger Forschungshefte, C 209, p. 137-151, illus., tables, 1967.

Harzer, D. See *Rosler, Hans J. 273-327*

271-331 **Hasegawa, Akira.** Heating of the magnetospheric plasma by electromagnetic waves generated in the magnetosheath: Jour. Geophys. Research, v. 74, no. 7, p. 1763-1771, illus., 1969.

265-323 **Hasegawa, Hiroshi.** A new method for numerical calculations of the formulae of pseudo-gravimetric anomalies [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 5, p. 198-207, illus., table, 1967.

272-269 **Hashizume, Michio; Oike, Kazuo; Asano, Shuzo; Hamaguchi, Hiroyuki; Okada, Atusi; Murauchi, Sadanori; Shima, Etsuzo; Nogoshi, Mitsuo.** Crustal structure in the profile across northeastern Honshu, Japan, as derived from explosion seismic observations—Pt. 2, Crustal structure [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 4, p. 273-281, illus., 1968.

Hashmy, K. H. See *Itenberg, S. S. 274-472*

271-329 **Haskell, G. P.** Anisotropic fluxes of energetic particles in the outer magnetosphere: Jour. Geophys. Research, v. 74, no. 7, p. 1740-1748, illus., 1969.

274-144 **Haskell, N. A.** Elastic displacements in the near-field of a propagating fault: Seismol. Soc. America Bull., v. 59, no. 2, p. 865-908, illus., table, 1969.

Haskin, Larry A. See *Frey, Fred A. 266-378*

Haskin, Mary A. See *Frey, Fred A. 266-378*

Hasnain, Iqbal. See *Verma, R. K. 273-383*

Hassall, Geraldine I. See *Callow, W. J. 271-011*

269-616 **Hatakeyama, Tsutomu; Hayashi, Hajime.** Experimental study on improvement of reflection seismograms in area covered by thick unconsolidated formation in Niigata Plain, Japan, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 488-503, illus., 1967.

264-243 **Hatherton, T.; Hunt, T. M.** Gravity profiles across the Alpine fault, New Zealand: Jour. Geophys. Research, v. 73, no. 16, p. 5343-5352, illus., table, 1968,

Hatherton, T. See *Cowan, Margaret. 266-340*

274-376 **Hatherton, T.** A source for volcanic material in the Mohakatino beds: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1207-1210, illus., 1968.

265-288 **Hatherton, Trevor.** "Miogeosynclinal andesites": Earth and Planetary Sci. Letters, v. 4, no. 6, p. 441-447, illus., table, 1968.

267-222 **Hatherton, Trevor.** Through the looking glass—A comparative study of New Zealand and California: Nature, v. 220, no. 5168, p. 660-663, illus., 1968.

269-197 **Hatherton, Trevor.** Gravity and seismicity of asymmetric active regions: Nature, v. 221, no. 5178, p. 353-355, illus., 1969.

274-127 **Hatherton, Trevor.** Reply to R. P. Suggate's letter [Seismicity and structure in south-west New Zealand and the Macquarie Ridge]: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1278-1279, illus., 1968.

266-130 **Hatori, Tokutaro.** Study on distant tsunamis along the coast of Japan—Pt. 2, Tsunamis of South American origin [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 345-359, illus., table, 1968.

Hatori, Tokutaro. See *Morimoto, Ryohei. 270-455*

Hatori, Tokutaro. See *Kajiura, Kinjiro. 271-081*

Hattori, A. See *Miyamoto, S. 269-123*

Hattori, Sadaiku. See *Iida, Kumizi. 273-459*

Hatuda, Zin-itiro. See *Katsura, Kyozo. 274-412*

272-304 **Haurwitz, Marion W.** Auroral substorm activity in relation to storm sudden commencements, ring current effects, and energetic solar protons: Jour. Geophys. Research, v. 74, no. 9, p. 2348-2355, illus., 1969.

Havey, Robert W. See *Saunders, John M. 270-429*

272-510 **Hawkes, I.; Fellers, G. E.** Theory of the determination of the greatest principal stress in a biaxial stress field using photoelastic hollow cylinder inclusions: Internat Jour. Rock Mechanics and Mining Sci., v. 6, no. 2, p. 143-158, illus., tables, 1969.

272-080 **Hawkins, J. E.** Seismic signatures, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 225-236, illus., 1968.

269-695 **Hawkins, William K.; Gearhart, Marvin.** Use of logging in uranium prospecting, *in* Black Hills area, South Dakota, Montana, Wyoming—Wyoming Geol. Assoc., 20th Field Conf., 1968, Guidebook: Casper, Wyo., Petroleum Inf., p. 131-139, illus., 1968.

272-544 **Hawkins, William K.; Gearhart, Marvin.** Use of logging in uranium prospecting, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. T1-T13, illus., table, 1968.

Hawley, J. W. See *Gile, L. H. 268-013*

Hay, Richard L. See *Coats, Robert R. 270-439*

Hay, Ruth J. See *Ogden, J. Gordon, 3d. 271-012*

265-281 **Hayakawa, Masami.** Present status of offshore and marine geophysical prospecting [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 1, p. 1-7, illus., 1968.

Hayakawa, Masami. See *Singh, Randhir. 268-341*

Hayakawa, Masami. See *Singh, Randhir 266-390*

275-418 **Hayakawa, Masami.** On the activity of the ECAFE offshore prospecting committee [in Japanese with English abs.]: Butsuri-Tanko, v. 21, nos. 5-6, p. 252-272, illus., 1968.

268-056 **Hayakawa, S.; Matsumoto, T.; Mizuno, T.; Nishimura, T.; Okuda, H.; Sugimoto, D.** Infrared observations of the Moon: Icarus, v. 9, no. 2, p. 357-359, illus., 1968.

Hayama, Yoshikazu. See *Shibata, Ken. 269-074*

Hayasaka, Isao. See *Nakagawa, Hisao. 275-332*

Hayase, Ichikazu. See *Matsumoto, Tatsuro. 273-017*

Hayashi, Hajime. See *Hatakeyama, Tsutomu. 269-616*

270-265 **Hayashi, K.; Kokubun, S.; Oguti, T.** Polar chorus emission and worldwide geomagnetic variation: Rept. Ionosphere and Space Research Japan, v. 22, no. 3, p. 149-160, illus., 1968.

Hayes, Dennis E. See *Pitman, Walter C., 3d. 266-255*

Haynes, C. V. See *Grey, D. C. 272-009*

266-016 **Haynes, C. V., Jr.** Geochronology of late-Quaternary alluvium, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 591-631, illus., tables, 1968.

269-036 **Haynes, C. Vance.** Bone organic matter and radiocarbon dating, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 163-168, table, 1968.

264-001 **Haynes, Vance.** Radiocarbon—Analysis of inorganic carbon of fossil bone and enamel: Science, v. 161, no. 3842, p. 687-688, table, 1968.

275-329 **Hays, James D.; Saito, Tsunemasa; Opdyke, Neil D.; Burckle, Lloyd H.** Pliocene-Pleistocene sediments of the equatorial Pacific—Their paleomagnetic, biostratigraphic, and climatic record: Geol. Soc. America Bull., v. 80, no. 8, p. 1481-1513, illus., tables, 1969.

268-390 **Heacock, R. R.** Large amplitude Pc 1 events at College: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 263-269, illus., 1968.

273-350 **Heacock, R. R.** Some observations of *ssc* micropulsation wave-packets: Planetary and Space Sci., v. 17, no. 4, p. 767-768, illus., 1969.

271-268 **Healy, D. L.** Application of gravity data to geologic problems at Nevada Test Site, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 147-156, illus., table, 1968.

Healy, J. See *Springer, D. 266-174*

267-303 **Healy, J.** Factors in geothermal investigations at Waiotapu, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 133-135, 1963.

265-101 **Healy, J. H.; Rubey, W. W.; Griggs, D. T.; Raleigh, C. B.** The Denver earthquakes: Science, v. 161, no. 3848, p. 1301-1310, illus., tables, 1968.

Healy, J. H. See *Borcherdt, R. D. 269-601*

274-466 **Hearst, J. R.; Carlson, R. C.** The RIDS—A density logger for rough holes: Geophysics, v. 34, no. 2, p. 222-234, illus., table, 1969.

265-670 **Hearst, Joseph R.** Effects of medium variations on the measurement of in situ hydrogen content: Geophysics, v. 33, no. 4, p. 657-667, illus., 1968.

266-073 **Heather, Michael A.** The reliability of ancient eclipse records: Royal Astron. Soc. Geophys. Jour., v. 15, no. 5, p. 549-550, 1968.

Hebeda, E. H. See *Priem, H. N. A. 266-030*

Hebeda, E. H. See *Priem, H. N. A. 269-012*

Hebeda, E. N. See *Priem, H. N. A. 270-015*

Hecht, F. See *Schaudy, R. 271-038*

272-238 **Hedemann, H.-A.** Beiträge zur Geothermik aus Tiefbohrungen [Contributions to geothermics from deep wells]: Freiberger Forschungshefte C 238, p. 63-77, illus., table, 1968.

268-120 **Hédervári, Péter.** Investigations regarding the Earth's seismicity – Pt. 5, On the earthquake geography of the Pacific Ocean and the seismotectonical importance of the andesite line. Section 2, The andesite line in detail and its physical nature: Gerlands Beitr. Geophysik, v. 76, no. 6, p. 467-490, illus., table, 1967.

Hédervári, Péter. See *Katterfel'd, G. N. 269-162*

269-171 **Hédervári, Péter.** On some similarities and differences between Earth and Moon: Ostrava Vysoke Skoly Banske, Sbornik Ved. Praci, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 157-170, illus., 1968.

269-204 **Hédervári, Péter.** On the structure of the basin of Pacific Ocean: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 25-49, illus., 1968.

270-451 **Hédervári, Péter.** Volcanophysical investigations on the energetics of the Minoan eruption of Volcano Santorin: Bull. Volcanol., v. 32, no. 2, p. 81-92, illus., tables, 1968.

271-071 **Hédervári, Péter.** On the (energetical) periodicity of earthquake activity of the Earth as a whole: Indian Geophys. Union Jour., v. 4, no. 2, p. 81-92, illus., tables, 1967.

271-553 **Hédervári, Péter.** A suggestion for the application of new symbols in the short description of different volcanic phenomena: Bull. Volcanol., v. 32, no. 1, p. 301-308, tables, 1968.

274-066 **Hédervári, Péter.** Similar tectonic patterns on Earth and Moon: Annali Geofisica, v. 21, no. 1, p. 73-90, illus., 1968.

Hedge, C. E. See *Doe, B. R. 275-271*

264-005 **Hedge, Carl E.; Peterman, Zell E.; Case, J. E.; Obradovich, John D.** Precambrian geochronology of the northwestern Uncompahgre Plateau, Utah and Colorado: U.S. Geol. Survey Prof. Paper 600-C, p. C91-C96, illus.,tables, 1968.

Hedge, Carl E. See *Peterman, Zell E. 273-029*

Heerema, Clarence E. See *Porcello, Leonard J. 270-042*

Heezen, B. C. See *Cassidy, W. A. 270-020*

264-214 **Heezen, Bruce C.** The Atlantic continental margin, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 5-25, illus., 1968.

Heezen, Bruce C. See *Fox, P. J. 267-604*

Heezen, Bruce C. See *Shepard, Francis P. 269-674*

Heezen, Bruce C. See *Fox, Paul J. 273-486*

270-281 **Hegymegi, László; Körmende, Alpár; Szulyovszky, Imre.** Protonprecesszioś mágneses mérések a Balatonon [Proton precession magnetic measurements on the Balaton (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 6, p. 231-236, illus., 1968.

Hehuwat. See *Katili, John A. 273-263*

268-587 **Heidecker, E.** Rock pressures induced by weathering and physicochemical processes: Australasian Inst. Mining and Metallurgy Proc., no. 226, pt. 1, p. 43-45, illus., 1968.

Heier, K. S. See *Green, D. H. 264-292*

Heier, K. S. See *Lambert, I. B. 271-499*

269-194 **Heigold, Paul C.** Notes on the earthquake of November 9, 1968, in southern Illinois: Illinois Geol. Survey Environmental Geology Notes, no. 24, 16 p., illus., table, 1968.

Heikkinen, A. See *Hyyppa, E. 271-015*

270-433 **Heinsheimer, Jorge J.** Algunos aspectos de la topografía y la geomorfología del fondo del Océano Atlántico austral [Some aspects of the topography and geomorphology of the bottom of the southern Atlantic Ocean (with English abs.)]: Buenos Aires, Argentina, Secretaria Marina Servicio Hidrografía Naval, 55 p., illus., 1965.

269-689 **Heintze, Carl.** The circle of fire—The great chain of volcanoes and Earth faults: New York, Meredith Press, 161 p., illus., 1968.

269-295 **Heirtzler, J. R.** Evidence for ocean floor spreading across the ocean basins, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 90-100, illus., 1968.

268-605 **Hekinian, Roger.** Rocks from the mid-oceanic ridge in the Indian Ocean: Deep-Sea Research, v. 15, no. 2, p. 195-213, illus., tables, 1968.

270-483 **Helander, Donald P.** Formation evaluation education at the University of Tulsa: Log Analyst, v. 9, no. 4, p. 18-20, illus., 1968.

Helander, Donald P. See *Konen, Charles E. 274-483*

Helliwell, R. A. See *Burtis, W. J. 273-341*

269-594 **Helmberger, Donald V.; Morris, Gerald B.** A travel time and amplitude interpretation of a marine refraction profile—Primary waves: Jour. Geophys. Research, v. 74, no. 2, p. 483-494, illus., 1969.

Helmsen, M. See *Carlson, A. E., Jr. 273-102*

268-404 **Helsley, Charles E.; Stehli, F. G.** Comparison of Permian magnetic and zoogeographic poles, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 558-563, 578-579, illus., 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 356-361, illus., 1968.

272-353 **Helsley, Charles E.; Steiner, Maureen B.** Evidence for long intervals of normal polarity during the Cretaceous Period: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 325-332, illus., tables, 1969.

Henage, Lyle F. See *Best, Myron G. 270-017*

267-082 **Henderson, Garry C.; Iverson, Robert M.** Testing gravimeters for lunar surface measurements: IEEE Trans. Geosci. Electronics, v. GE-6, no. 3, p. 132-138, illus., 1968.

Henderson, R. J. See *Emerson, D. W. 270-125*

273-173 **Henderson, R. J.; Emerson, D. W.** The location of deep aquifers by resistivity soundings: Australian Jour. Sci., v. 31, no. 8, p. 299-300, illus., 1969.

Henderson, Roland G. See *Cordell, Lindrith. 265-309*

Hendricks, S. J. See *Cain, J. C. 264-372*

266-488 **Henkel, H.** Trend analysis of geophysical data: Geoexploration, v. 6, no. 2, p. 69-99, illus., 1968.

271-281 **Henkel, H.** Direct interpretation of 2-dimensional gravity anomalies with a self-adjusting procedure using a digital computer—Pt. 1, Theoretical considerations [with German abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 299-317, illus., tables, 1968.

Henry, V. J., Jr. See *Hoyt, J. H. 266-014*

Henyey, Thomas L. See *Brune, James N. 275-085*

Heppner, J. P. See *Sugiura, M. 267-379*

267-615 **Herbert, Don; Bardossi, Fulvio.** Kilauea—Case history of a volcano: New York and London, Harper and Row, Publishers, 191 p., illus., 1968.

Herman, J. R. See *Chandra, S. 275-303*

266-012 **Herman, Y.** Evidence of climatic changes in Red Sea cores, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 325-348, illus., tables, 1968.

265-213 **Hermance, J. F.; Garland, G. D.** Magnetotelluric deep-sounding experiments in Iceland: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 469-474, illus., 1968.

267-313 **Hermes, O. Don.** Petrology of the Mecklenburg gabbro-metagabbro complex, North Carolina: Contr. Mineralogy and Petrology, v. 18, no. 3, p. 270-294, illus., tables, 1968.

268-544 **Hermont, A. J.** Sobre la respuesta de filtros sísmicos [On the response to seismic filtering]: Asoc. Mexicana Geofísicos Explor. Bol., v. 8, no. 1, p. 3-65, illus., 1967.

274-422 **Hermont, A. J.** Is seismic energy of diagnostic value?: Geophysics, v. 34, no. 2, p. 196-212, illus., table, 1969.

Hernández Fernández, M. E. See *Cadavid Camina, S. 269-464*

269-098 **Herpers, U.; Herr, W.; Wölfle, R.** Determination of cosmic-ray-produced-nuclides ^{53}Mn, ^{45}Sc and ^{26}Al in meteorites by neutron activation and gamma coincidence spectroscopy, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 195-205, tables, 1967.

Herr, W. See *Kaufhold, J. 269-046*

269-051 **Herr, W.; Wölfle, R.; Eberhardt, E.; Kopp, E.** Development and recent applications of the Re/Os dating method, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 499-508, illus., tables, 1967.

Herr, W. See *Herpers, U. 269-098*

265-102 **Herrin, Eugene.** 1968 seismological tables for P phases: Seismol. Soc. America Bull., v. 58, no. 4, p. 1193-1241, tables, 1968.

Herrin, Eugene. See *Tucker, William. 265-103*

265-105 **Herrin, Eugene; Tucker, William; Taggart, James; Gordon, David W.; Lobdell, John L.** Estimation of surface focus P travel times: Seismol. Soc. America Bull., v. 58, no. 4, p. 1273-1291, illus., tables, 1968.

265-108 **Herrin, Eugene; Taggart, James.** Regional variations in P travel times: Seismol. Soc. America Bull., v. 58, no. 4, p. 1325-1337, illus., tables, 1968.

269-183 **Herrin, Eugene; Taggart, James.** Source bias in epicenter determinations: Seismol. Soc. America Bull., v. 58, no. 6, p. 1791-1796, illus., tables, 1968.

272-140 **Herrmann, Robert B.** The structure of the Cincinnati Arch as determined by short period Rayleigh waves: Seismol. Soc. America Bull., v. 59, no. 1, p. 399-407, illus., tables, 1969.

264-194 **Hervás Burgos, Pablo.** Generalización en la teoría analítica de los campos [Gereralization in the analytical theory of fields]: Rev. Geofísica, v. 25, nos. 99-100, p. 147-153, 1966.

265-621 **Hervás Burgos, Pablo.** Aplicación de las ecuaciones de Appell a los sistemas electromecanicos [Application of the Appell equations to electromechanical systems (with English summ.)]: Rev. Geofísica, v. 25, no. 98, p. 85-93, illus., 1966.

273-229 **Herz, Norman.** Anorthosite belts, continental drift, and the anorthosite event: Science, v. 164, no. 3882, p. 944-947, illus., table, 1969.

270-480 **Heseldin, G. M.** The use of error ratio in least square fitting of data: Log Analyst, v. 9, no. 3, p. 22-25, illus., 1968.

270-491 **Heslop, A.** Application of porosity-water saturation relationships to log analysis in southeast Saskatchewan, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. [D]1-[D]6, illus., 1968.

268-216 **Hess, H. H.** Reply [to "Arthur Holmes—Originator of spreading ocean floor hypothesis," by A. A. Meyerhoff (1968)]: Jour. Geophys. Research, v. 73, no. 20, p. 6569, 1968.

Hessler, V. P. See *Troitskaya, V. A. 267-407*

Hetherington, Ernest A., Jr. See *Denison, Rodger E. 269-006*

Hetherington, N. See *Rea, D. G. 267-074*

272-006 **Hewett, D. F.; Stone, Jerome; Stieff, Lorin R.** The ages of three uranium minerals, Mojave Desert, California, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B84-B88, tables, 1969.

274-011 **Heylen, J.; Kleber, R.** Effective accelerated purification of carbon dioxide and methane for C-14 measurements: Appl. Sci. Research,v. 19, nos. 3-4, p. 302-310, 1968.

269-102 **Heymann, D.; Mazor, E.** Radiation ages and gas-retention ages of carbonaceous chondrites and unequilibrated ordinary chondrites, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 239-257, illus., tables, 1967.

270-026 **Heymann, Dieter; Mazor, Emanuel; Anders, Edward.** Ages of calcium-rich achondrites—[Pt.] 1, Eucrites: Geochim. et Cosmochim. Acta, v. 32, no. 12, p. 1241-1268, illus., tables, 1968.

Heymann, Dieter. See *Anders, Edward. 273-044*

268-071 **Hibbs, Albert R.** Surveyor results: Astronautics and Aeronautics, v. 7, no. 1, p. 50-63, illus., 1969.

273-168 **Hickman, G. Daniel; Hogg, John E.** Application of an airborne pulsed laser for near short bathymetric measurements: Remote Sensing Environment, v. 1, no. 1, p. 47-58, illus., 1969.

Hicks, B. B. See *Dyer, A. J. 269-690*

Hicks, W. G. See *Musgrave, A. W. 265-609*

266-383 **Hide, R.; Horai, K.** On the topography of the core-mantle interface: Physics Earth and Planetary Interiors, v. 1, no. 5, p. 305-308, illus., 1968.

274-286 **Hide, R.** Interaction between the Earth's liquid core and solid mantle: Nature, v. 222, no. 5198, p. 1055-1056, 1969.

266-026 **Higashimura, Takenobu; Ichikawa, Yoneta; Sidei, Tunahiko.** Thermoluminescence dating of pottery using separated mineral fraction, Chap. 7.9 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 441-443, 1968.

Higgins, Gary H. See *Teller, Edward. 275-133*

275-425 **Higgins, Michael W.; Waters, Aaron C.** Newberry caldera field trip,*in* Andesite conference guidebook—Internat. Upper Mantle Proj. Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Industries Bull. 62, p. 59-77, illus., table, 1968.

270-486 **Hilchie, D. W.** Maximum temperatures recorded in wellbores: Log Analyst, v. 9, no. 5, p. 21-24, illus., 1968.

270-495 **Hilchie, D. W.; Mills, W. R.; Dennis, C. L.; Givens, W. W.** Factors affecting thermal neutron lifetime measurements, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. I1-I32, table, 1968.

272-541 **Hilchie, D. W.; Mills, W. R.; Dennis, C. L.; Givens, W. W.** Some aspects of pulsed neutron logging, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. Q1-Q26, illus., table, 1968.

273-502 **Hilchie, D. W.; Mills, W. R.; Dennis, C. L.; Givens, W. W.** Some aspects of pulsed neutron logging: Log Analyst, v. 10, no. 2, p. 7-17, illus., table, 1969.

Hilde, Thomas W. C. See *Fisher, Robert L. 271-184*

273-487 **Hilde, Thomas W. C.; Wageman, John M.; Hammond, Willis T.** The structure of Tosa Terrace and Nankai Trough off southeastern Japan: Deep-Sea Research, v. 16, no. 1, p. 67-75, illus., 1969.

274-433 **Hileman, J. A.; Emoree, P.; Pflueger, J. C.** Automated static corrections: Geophys. Prosp. [Netherlands], v. 16, no. 3, p. 326-358, illus., 1968.

273-259 **Hilgenberg, Ott C.** Earth expansion, deep-sea trenches, and the inclination of shelf-sea floors: Neues. Jahrb. Geologie u. Paläontologie Monatsh., no. 3, p. 138-145, illus., 1969.

273-260 **Hilgenberg, Ott C.** Der Einfluss des Masses der Erdexpansion auf der Vererzung der Erdkruste und die Lage der Erdpole [The effect of the mass of earth expansion on mineralization of the Earth's crust and the position of the Earth's pole]: Neues Jahrb. Geologie u. Paläonotologie Monatsh., no. 3, p. 146-159, illus., tables, 1969.

272-251 **Hill, David P.** Crustal structure of the Island of Hawaii from seismic-refraction measurements: Seismol. Soc. America Bull., v. 59, no. 1, p. 101-130, illus., tables, 1969.

Hill, H. L. See *Seigel, H. O. 265-269*

266-276 **Hill, Mason L.; Hobson, Henry D.** Possible post-Cretaceous slip on the San Andreas fault zone, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 123-127, discussion, p. 128-129, 1968.

Hill, Walter E., Jr. See *Gillerman, Elliot. 264-051*

265-130 **Hiller, W.; Rothé, J.-P.; Schneider, G.** La seismicité du Fosse rhenan [The seismicity of the Rhinegraben], *in* The Rhinegraben progress report 1967: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 98-100, illus., 1967.

267-006 **Hills, F. Allan; Gast, P. W.; Houston, R. S.; Swainbank, I. G.** Precambrian geochronology of the Medicine Bow Mountains, southeastern Wyoming: Geol. Soc. America Bull., v. 79, no. 12, p. 1757-1783, illus., tables, 1968.

272-083 **Himmelstein, S.** Analysis and detection of non-recurring phenomena, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 435-446, illus., 1968.

264-328 **Hindle, P. H.; Reay, N. K.; Ring, J.** H_{beta} radiation in the spectrum of the night sky: Planetary and Space Sci., v. 16, no. 6, p. 803-808, illus., table, 1968.

275-311 **Hine, Alfred.** Magnetic compasses and magnetometers: Toronto, Ontario, Univ. Toronto Press, 385 p., illus., tables, 1968.

266-249 **Hinich, M. J.; Clay, C. S.** The application of the discrete Fourier transform in the estimation of power spectra, coherence, and bispectra of geophysical data: Rev. Geophysics, v. 6, no. 3, p. 347-363, illus., 1968.

Hinz, Eckart. See *Behrens, Jorn. 272-147*

266-240 **Hinz, K.** A contribution to the geology of the North Sea according to geophysical investigations by the Geological Survey of German Federal Republic, *in* Geology of shelf seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver and Boyd, p. 55-71, illus., 1968.

Hirabayashi, Jun'ichi. See *Morimoto, Ryohei. 270-455*

Hiraga, Shiro. See *Minakami, Takeshi. 271-562*

Hirai, Masayo. See *Kasahara, Keichi. 266-134*

Hirai, Masayo. See *Kasahara, Keichi. 266-138*

264-529 **Hiramatsu, Y.; Oka, Y.** Determination of the stress in rock unaffected by boreholes or drifts, from measured strains or deformations: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 4, p. 337-353, illus., tables, 1968.

Hirao, Y. See *Hamaguchi, H. 273-045*

265-633 **Hirasawa, Kiyoshi; Ito, Kosuke.** Seismic reflection prospecting atOtoeyama district in the northern part of the Ishikari coal field, Hokkaido [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 18, no. 4, p. 273-280, illus., 1967.

265-634 **Hirasawa, Kiyoshi.** Seismic survey of the southern Odate area, Akita Prefecture—Seismic survey in the Hokuroku district, Report No. 3 [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 18, no. 5, p. 360-369, illus., tables, 1967.

Hirasawa, Takeo. See *Fukunishi, Hiroshi. 273-357*

264-114 **Hirono, Takuzo.** Seismometrical features, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 47-62, illus., tables, 1968.

Hirosawa, M. See *Hisada, T. 268-127*

Hirschleber, H. B. See *Aric, K. 267-585*

268-121 **Hisada, T.** Damage to reinforced-concrete buildings in Niigata City due to the earthquake of 16 June 1964, *in* Proceeding the Internonalieminar Earthquake Enginein Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 29-32, 1968.

268-127 **Hisada, T.; Izumi, M.; Hirosawa, M.** Structural response of a tall building to earthquake shocks, *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 63-68, tables, 1968.

Hjelmstad, K. See *Bur, T. R. 272-141*

266-212 **Hjelt, Sven-Erik.** On the half-plane model in double-dipole electromagneti prospecting: Acta Polytechnica Scandinavica, Ph 60, 41 p., illus., table, 1968.

274-001 **Ho, T. Y.; Marcus, Leslie F.; Berger, Rainer.** Radiocarbon dating of petroleum impregnated bone from tar pits at Rancho La Brea, California: Science, v. 164, no 3883, p. 1051-1052, table, 1969.

270-441 **Hoare, Joseph M.; Condon, William H.; Cox, Allan; Dalrymple, G. Brent.** Geology, paleomagnetism, and potassium-argon ages of basalts from Nunivak Island Alaska, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc America Mem. 116, p. 377-413, illus., tables, 1968.

266-539 **Hobbs, B. H.; Talbot, J. L.** The analysis of strain in deformed rocks—Reply [t discussion by W. M. Chapple, 1968, Jour. Geology, v. 76, p. 491-494]: Jour. Geology, v. 76, no. 4, p. 494, 1968.

268-057 **Hobbs, R. W.; McCullough, T. P.; Waak, J. A.** Measurements of Mars at 1.55-c and 0.95-cm wavelengths: Icarus, v. 9, no. 2, p. 360-363, illus., 1968.

274-425 **Hobson, G. D.; MacAulay, H. A.** A seismic reconnaissance survey of th Athabasca Formation, Alberta and Saskatchewan (part of 74) (A co-operative venture with the Saskatchewan Department of Mineral Resources): Canada Geol. Survey Paper 69-18, 23 p., illus., 1969.

Hobson, George D. See *Donato, R. J. 272-492*

273-457 **Hobson, George D.; Terasmae, J.** Pleistocene geology of the buried St. Davids Gorge, Niagara Falls, Ontario—Geophysical and palynological studies: Canada Geol. Survey Paper 68-67, 16 p., illus., table, 1969.

275-361 **Hobson, George D.** Hammer refraction seismic survey to assist biogeochemical program Lucky Ship, British Columbia, App. D *in* Biogeochemical prospecting for molybdenum in west-central British Columbia: Canada Geol. Survey Paper 68-56, p. 30-41, illus., table, 1969.

Hobson, Henry D. See *Hill, Mason L. 266-276*

271-267 **Hodge, Dennis S.; Mayewski, Paul A.** Gravity study of a hypersthene syenite in the Laramie anorthosite complex, Wyoming: Geol. Soc. America Bull., v. 80, no. 4, p. 705-713, illus., table, 1969.

268-030 **Hodge, Paul W.; Wright, Frances W.** Studies of particles for extraterrestrial origin—[Pt.] 6, Comparisons of previous influx estimates and present satellite flux data: Jour. Geophys. Research, v. 73, no. 24, p. 7589-7592, illus., 1968.

Hodge, Paul W. See *Brownlee, Donald E. 269-088*

275-040 **Hodge, Paul W.; Wright, Frances W.** A semiempirical estimate of the micrometeorite flux at the Earth's surface and its implications: Icarus, v. 10, no. 2, p. 214-219, illus., 1969.

269-113 **Hodges, R. R., Jr.** Radiative decay in carbon dioxide: Jour. Geophys. Research, v. 74, no. 3, p. 862-867, illus., 1969.

274-295 **Hoefs, J.; Nielsen, H.; Schidlowski, M.** Sulfur isotope abundances in pyrite from the Witwatersrand conglomerates: Econ. Geology, v. 63, no. 8, p. 975-977, illus., tables, 1968.

275-276 **Hoefs, J.; Epstein, S.** O-18:O-16 ratios of minerals from migmatites, rapakivi granites and orbicular rocks: Lithos, v. 2, no. 1, p. 1-8, illus., tables, 1969.

264-304 **Hoefs, Joachim; Graeser, Stefan.** Schwefelisotopenuntersuchungen an Sulfiden und Sulfosalzen des Binnatales [Sulfur isotope investigations of sulfides and sulfosalts from the Binna Valley (with English abs.)]: Contr. Mineralogy and Petrology, v. 17, no. 3, p. 165-172, illus., table, 1968.

275-002 **Hoffer, Jerry M.** The San Miguel lava flow, Dona Ana County, New Mexico: Geol. Soc. America Bull., v. 80, no. 7, p. 1409-1413, illus., table, 1969.

267-380 **Hoffman, R. A.; Cahill, L. J., Jr.** Ring current particle distributions derived from ring current magnetic field measurements: Jour. Geophys. Research, v. 73, no. 21, p. 6711-6722, illus., 1968.

266-273 **Hofmann, Renner B.** Recent changes in California fault movement, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 89-93, illus., 1968.

Hofmann, Walther. See *Dorrer, Egon. 273-280*

Hogg, John E. See *Hickman, G. Daniel. 273-168*

273-281 **Holdsworth, G.** Primary transverse crevasses: Jour. Glaciology, v. 8, no. 52, p. 107-129, illus., tables, 1969.

268-578 **Holland, Charles T.; Olsen, David A.** Interfacial friction, moisture and coal pillar strength: Soc. Mining Engineers Trans., v. 241, no. 3, p. 323-328, illus., table, 1968.

270-011 **Hollingworth, S. E.; Rutland, R. W. R.** Studies of Andean uplift—Pt. 1, Post-Cretaceous evolution of the San Bartolo area, north Chile: Geol. Jour., v. 6, pt. 1, p 49-62, illus., 1968.

266-092 **Hollister, John C.; Weimer, Robert J.** (editors). Geophysical and geological studies of the relationships between the Denver earthquake and the Rocky Mountai Arsenal well—Pt. A [papers]; Pt. B, maps: Colorado School Mines Quart., v. 63, no 1, 251 p., illus., tables, 1968.

266-093 **Hollister, John C.; Weimer, Robert J.** General summary and conclusions, *i* Geophysical and geological studies of the relationships between the Denve earthquake and the Rocky Mountain Arsenal well, Pt. A: Colorado School Mine Quart., v. 63, no. 1, p. 1-8, illus., tables, 1968.

274-187 **Holló, Lajos; Vero, József.** Zur Charakterisierung der Pulsationsstetigkeit de erdmagnetischen Feldes für einzelne Tage und deren Anwendung [On the charac terization of the pulsation activity of the geomagnetic field for individual days and it application (with English and Russian summ.)]: Acad. Sci. Hungaricae Acta Geod. Geophys. et Montan., v. 2, nos. 3-4, p. 335-349, illus., tables, 1967.

268-365 **Hollweg, Joseph V.** Interaction of the solar wind with the Moon and the forma tion of a lunar limb shock wave: Jour. Geophys. Research, v. 73, no. 23, p. 7269 7276, illus., 1968.

273-338 **Hollweg, Joseph V.** Stochastic heating of protons by fast hydromagnetic wave Jour. Geophys. Research, v. 74, no. 11, p. 2899-2907, illus., 1969.

266-007 **Holmes, C. W.** Th-230/Th-232 (ionium-thorium) dating of deep-se foraminiferal ooze, *in* Means of correlation of Quaternary successions—Internat. As soc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah Univ. Utah Press, p. 207-239, illus., tables, 1968.

264-009 **Holmes, Charles W.; Osmond, J. K.; Goodell, H. G.** The geochronology o foraminiferal ooze deposits in the "Southern Ocean": Earth and Planetary Sci. Let ters, v. 4, no. 5, p. 368-374, illus., tables, 1968.

Holstrom, G. B. See *Conel, J. E. 269-089*

266-507 **Holstrom, Geoffrey.** Nonlinear energy transfer in elastic waves: Geophysics, 33, no. 5, p. 734-746, illus., 1968.

Holt, H. E. See *Shoemaker, E. M. 268-078*

Holt, H. E. See *Shoemaker, E. M. 275-071*

Holton, James R. See *Businger, Joost A. 264-069*

265-632 **Holub, Karel.** Graphs for determining small epicentral distances by means acoustic waves: Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. p. 329-332, illus., table, 1968.

272-153 **Holub, Karel.** Investigations of vibrations near shot-hole explosions [with Czec and Russian abs.]: Československá Akad. Věd Geofys. Sbornik 1967, v. 15, 239-253, illus., table, 1968.

267-225 **Holubec, Jan.** Structural development of the geosynclinal Proterozoic and i relations to the deeper zones of the Earth's crust (central European domain) [wi Czech abs.]: Československá Akad. Věd Rozpravy, v. 78, no. 8, p. 3-77, illus., 196

Holzer, Robert E. See *Russell, Christopher T. 265-387*

Holzer, Robert E. See *Russell, Christopher T. 269-387*

Holzer, Robert E. See *Smith, Edward J. 273-344*

Holzer, Robert E. See *Frandsen, Allan M. A. 275-309*

275-146 **Homma, Ichiro.** On the geophysical prospecting of overseas metal mines—Pt. 3, An electrical prospecting for gold and copper deposits at the Chinkuashih mine, Taiwan, Republic of China [in Japanese with English abs.]: Butsuri-Tanko, v. 21, nos. 5-6, p. 290-296, illus., 1968.

270-280 **Homola, Vladimír; Müller, Karel; Smirkovská, Vera.** Geologisch-geophysikalische Studien im Gebiet des westmährischen Moldanubikums [Geologic and geophysical studies in the region of the west Moldavian Moldanubicum (with English abs.)]: Freiberger Forschungshefte, C 227, 71 p., illus., tables, 1968.

Honda, Masatake. See *Matsuda, Hideki. 275-046*

Honea, R. M. See *Strangway, D. W. 266-451*

268-369 **Hones, E. W., Jr.; Singer, S.; Rao, C. S. R.** Simultaneous observations of electrons (E> 45 kev) at 2,000-kilometer altitude and at 100,000 kilometers in the magnetotail: Jour. Geophys. Research, v. 73, no. 23, p. 7339-7359, illus., tables, 1968.

272-335 **Hones, Edward W., Jr.** Electric fields and plasma convection in the magnetosphere, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York and Amsterdam, Reinhold Book Corp., p. 403-416, illus., table, 1968.

Honkasalo, T. See *Olander, V. R. 275-198*

264-251 **Honkasalo, Tauno.** Underwater gravity measurement in the Baltic Sea and in the Barents Sea, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 217-219, illus., 1967.

275-234 **Honkasalo, Tauno.** Gravity measurements, *in* Geodeettinen Laitos (The Finnish Geodetic Institute), 1918-1968: Suomen Geol. Lait. Jul. (INNISH Geod. Inst. Pubs.), no. 65, p. 97-114, illus., tables, 1969.

270-168 **Hood, P.** Obzor geofizicheskoy apparatury, razbabotannoy v 1965 g. [Review of geophysical apparatus developed in 1965]: Geofiz. Apparatura, no. 35, p. 7-12, illus., 1968.

Hood, Peter J. See *Godby, E. A. 268-422*

269-254 **Hood, Peter J.; Kellogg. William C.** Geophysical activity in 1967 applied to mining exploration: Geophysics, v. 33, no. 6, p. 903-910, illus., tables, 1968.

Hoover, D. B. See *Rummerfield, Ben F. 269-595*

273-116 **Hoover, D. B.; Dietrich, J. A.** Seismic activity during the 1968 test pumping at the Rocky Mountain Arsenal disposal well: U.S. Geol. Survey Circ. 613, 35 p., illus., tables, 1969.

Hoover, Donald B. See *Whitebread, Donald H. 267-156*

Hopkins, David M. See *Scholl, David W. 269-680*

275-409 **Hopkins, David M.** (and others). Cretaceous, Tertiary, and early Pleistocene rocks from the continental margin in the Bering Sea: Geol. Soc. America Bull., v. 80, no. 8, p. 1471-1480, illus., 1969.

Hopkins, R. M. See *Froelich, A. J. 270-159*

266-072 **Hopmann, J.** Unexplained radiation phenomena on the Moon, Chap. 11.3 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 579-586, illus., table, 1968.

Horai, K. See *Hide, R. 266-383*

Horai, Ki-iti. See *Simmons, Gene. 266-360*

268-149 **Horai, Ki-iti; Simmons, Gene.** Seismic travel time anomaly due to anomalous heat flow and density: Jour. Geophys. Research, v. 73, no. 24, p. 7577-7588, illus., tables, 1968.

Hori, Masao. See *Endo, Gensuke. 265-233*

265-669 **Horibe, Tomio; Kobayashi, Ryoji; Okumura, Kiyohiko; Suzuki, Shuzo.** Study o measurement of tensile strength of rocks [in Japanese with English abs.]: Tohoku Kozan, v. 14, nos. 1-2, p. 10-16, illus., tables, 1967.

Horie, Kinuko. See *Matsuda, Hideki. 275-046*

266-011 **Horie, S.** Late Pleistocene climatic changes inferred from the stratigraphic sequences of Japanese lake sediments, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8 Salt Lake City, Utah, Univ. Utah Press, p. 311-324, illus., table, 1968.

265-598 **Horikawa, Yoshio; Obi, Nakamura; Kiyohara, Kiyoto.** Radiometric survey with car-mounted instrument in the Kumamoto area [in Japanese with English abs.] Japan Geol. Survey Bull., v. 19, no. 3, p. 183-185, illus., table, 1968.

Horitsu, Tasaburo. See *Kunori, Shoichi. 265-235*

Horn, Robert. See *Bouysse, Philippe. 266-511*

Horn, Robert. See *Bouysse, Philippe. 270-356*

Hornemann, U. See *Muller, W. F. 268-037*

274-049 **Horowitz, N. H.; Bauman, A. J.; Cameron, R. E.; Geiger, P. J.; Hubbard, J. S. Shulman, G. P.; Simmonds, P. G.; Westberg, K.** Sterile soil from Antarctica—Or ganic analysis: Science, v. 164, no. 3883, p. 1054-1056, tables, 1969.

270-107 **Horvath, R.; Lowe, D. S.** Multispectral survey in the Alaskan Arctic, *in* Symposi um on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ Michigan, Willow Run Labs., p. 483-496, illus., 1968.

Hörz, F. See *Engelhardt, W. von. 273-084*

273-068 **Hörz, Friedrich.** Statistical measurements of deformation structures and refrac tive indices in experimentally shock loaded quartz, *in* Shock metamorphism of natu ral materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Boo Corp., p. 243-253, illus., 1968.

Hoshino, Kazuo. See *Nagumo, Shozaburo. 264-107*

264-548 **Hoshino, Michihei; Iwabuchi, Yoshio.** Topography of continental slopes aroun the Japanese Islands [in Japanese with English abs.]: Tokai Univ. Fac. Oceanograph Jour., no. 1, p. 37-49, illus., 1966.

268-583 **Hoskins, E. R.** Strain rosette relief measurements in hemispherically ende boreholes: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 6, p. 551-559, i lus., 1968.

273-482 **Hoskins, E. R.** The failure of thick-walled hollow cylinders of isotropic rock: I ternat. Jour. Rock Mechanics and Mining Sci., v. 6, no. 1, p. 99-125, illus., table 1969.

270-080 **Hosono, Yoshizumi.** Unusual change of level and quality of ground water resul ing from Matsushiro earthquake swarm [in Japanese with English abs.]: Geol. So Japan Jour., v. 74, no. 11, p. 569-581, illus., tables, 1968.

271-366 **Hospers, J.; VanAndel, S. I.** Palaeomagnetic data from Europe and North America and their bearing on the origin of the North Atlantic Ocean: Tectonophysics, v. 6, no. 6, p. 475-490, illus., tables, 1968.

Hospers, J. See *VanAndel, S. I. 271-367*

273-226 **Hotine, M.; Morrison, F.** First integrals of the equations of satellite motion: Bull. Géod., no. 91, p. 41-45, 1969.

Hotta, H. See *Den, N. 271-506*

Hotta, Hiroshi. See *Den, Nozomu. 271-520*

275-367 **Hotta, Hiroshi.** Seismic reflection profiling on the continental slope of western Australia [in Japanese with English abs.]: Antarctic Rec., no. 34, p. 23-34, illus., 1969.

Hotta, Hosei. See *Nishimura, Kasuke. 275-112*

Hotz, Preston E. See *Lanphere, Marvin A. 264-019*

Houston, R. S. See *Hills, F. Allan. 267-006*

269-028 **Houtermans, J.; Suess, H. E.; Munk, W.** Effect of industrial fuel combustion on the Carbon-14 level of atmospheric CO_2, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 57-68, illus., tables, 1967.

Houtermans, J. C. See *Dockins, K. O. 269-033*

Houtz, R. E. See *Ewing, Maurice. 274-416*

Houtz, R. E. See *Sheridan, R. E. 274-417*

267-601 **Howard, J. H.** The role of displacements in analytical structural geology: Geol. Soc. America Bull., v. 79, no. 12, p. 1847-1853, illus., tables, 1968.

266-274 **Howard, John H.** Recent deformation of the Cholame and Taft-Maricopa areas, California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 94-108, illus., table, 1968.

Howard, Keith A. See *Wilshire, H. G. 266-069*

266-070 **Howard, Keith A.; Offield, Terry W.** Shatter cones at Sierra Madera, Texas: Science, v. 162, no. 3850, p. 261-265, illus., 1968.

269-116 **Howard, Keith A.; Masursky, Harold.** Geologic map of the Ptolemaeus quadrangle of the Moon: U.S. Geol. Survey Misc. Geol. Inv. Map I-566 (LAC-77; RLC-13), section, text, 1968.

264-480 **Howie, R. D.; Cumming, L. M.** Possible basement graben beneath Miramichi Bay, New Brunswick [with French abs.], *in* Collected papers on geology of the Atlantic region—Hugh Lilly Memorial Volume: Geol. Assoc. Canada Spec. Paper 4, p. 283-292, illus., 1967.

266-014 **Hoyt, J. H.; Henry, V. J., Jr.; Weimer, R. J.** Age of Late-Pleistocene shoreline deposits, coastal Georgia, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 381-393, illus., table, 1968.

275-410 **Hoyt, John H.; Oostdam, B. L.; Smith, David D.** Offshore sediments and valleys of the Orange River (South and South West Africa): Marine Geology, v. 7, no. 1, p. 69-84, illus., 1969.

270-376 **Hrdlička, L.** Untersuchung gemauerter Dämme aus Bruchstein mittels elastischer Wellen niedriger Frequenz [Investigation of masonry dams made of cut stone by means of low-frequency elastic waves]: Freiberger Forschungshefte, C 225, p. 151-161, illus., tables, 1967.

271-171 **Hristov, V.** Development de l'aplatissement et de la pesanteur terrestres jusqu'aux termes du troisième ordre inclusivement [Development of the terrestrial flattening and gravity up to the third order terms inclusive]: Bull. Geod., no. 90, p. 435-456, 1968.

274-362 **Hrouda, František; Janák, František; Stelcl, Jindřich.** Zur petrophysikalischen Charakteristik einiger Granodiorite des Brunner Massivs [On the petrophysical characteristics of some granodiorites from the Brno massif (with English and Russian summ.)]: Gerlands Beitr. Geophysik, v. 77, no. 6, p. 473-486, illus., tables, 1968.

267-395 **Hruška, A.** Interaction of plasma waves and particles in the non-uniform magnetosphere and acceleration of auroral particles: Planetary and Space Sci., v. 16, no. 10, p. 1297-1303, 1968.

267-396 **Hruška, A.** The magnetodynamic toroidal waves: Planetary and Space Sci., v. 16, no. 10, p. 1305-1309, 1968.

273-347 **Hruška, A.** Two-dimensional model of the neutral sheet in the Earth's magnetotail: Planetary and Space Sci., v. 17, no. 4, p. 665-673, illus., 1969.

272-348 **Hrušková, Jaroslava.** Investigation of the diurnal variation of amplitudes o geomagnetic pulsations Pc3 [with Czech and Russian abs.]: Československá Akad Věd Geofys. Sborník 1967, v. 15, p. 423-431, illus., 1968.

Hsu, I-Chi. See *Scharon, LeRoy. 274-358*

273-233 **Hsü, Jinghwa K.** Role of cohesive strength in the mechanics of overthrust faulting and of landsliding: Geol. Soc. America Bull., v. 80, no. 6, p. 927-952, illus., tables, 1969.

268-227 **Hsü, K. J.; Schlanger, S. O.** Thermal history of the upper mantle and its relatio to crustal history in the Pacific basin, *in* Internat. Geol. Cong., 23d, Prague, 1968 Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 91-105, illus., 1968.

271-538 **Hsü, K. Jinghwa.** Comments on the paper by J. D. Byerlee, "Frictional characteristics of granite under high confining pressure" [1967]: Jour. Geophys. Research v. 74, no. 6, p. 1712-1713, illus., 1969.

273-235 **Hsü, K. Jinghwa.** Role of cohesive strength in the mechanics of overthrust faulting and of landsliding—Reply [to discussion by M. K. Hubbert and W. W. Rubey o 1969 paper]: Geol. Soc. America Bull., v. 80, no. 6, p. 955-960, 1969.

274-109 **Huaco O., Daniel; Castillo V., Juan.** Zonas de fractura y regionalizacion sismic del Peru [Fracture zones and seismic regionalization of Peru]: Soc. Geog. Lima Bol. v. 87, p. 35-45, illus., table, 1968.

275-122 **Huang, Y. T.** Effect of an elastically-restrained boundary on dilatational wav radiation patterns: Seismol. Soc. America Bull., v. 59, no. 3, p. 1033-1050, illus 1969.

Hubbard, J. S. See *Horowitz, N. H. 274-049*

273-234 **Hubbert, M. King; Rubey, William W.** Role of cohesive strength in th mechanics of overthrust faulting and of landsliding—Discussion [of paper by K. Hsü, 1969]: Geol. Soc. America Bull., v. 80, no. 6, p. 953-954, 1969.

Hübnerová, Zdeňka. See *Karnik, Vi. 266-114*

265-148 **Huda, S. Q.** Seismology in Pakistan, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V.4: Tokyo, Internat. Inst. Seismology nd Earthquake Eng., p. 1-17, illus., tables, 1967.

270-461 **Hudson, Orlo K.** Lunar borehole logging: Log Analyst, v. 7, no. 2, p. 5-8, illus., 1966.

273-336 **Hudson, P. D.; Anderson, H. R.** Nonuniformity of solar protons over the polar caps on March 24, 1966: Jour. Geophys. Research, v. 74, no. 11, p. 2881-2890, illus., 1969.

Hughes, A. R. W. See *Bullough, K. 272-319*

Hughes, G. F. See *Belon, A. E. 268-373*

274-117 **Hughes, Richard F.** Denver's man-made earthquakes—Fact or fancy: Mines Mag., v. 58, no. 7, p. 22-24, 1968.

Hugo, P. J. See *Burger, A. J. 267-028*

267-567 **Hugo, P. J.; Bouwer, R. F.; Pike, D. R.; Hugo, P. L. V.; Harsenhorst, Z. de Velde.** Surface radiometric surveys in the Republic of South Africa[Africaans abs.]: South Africa Dept. Mines Geol. Survey Bull. 49, 46 p., illus., tables, 1967.

272-195 **Hulley, J. C. L.** Correlation between gravity anomalies, transcurrent faults and pole positions, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 224-227, 251, illus., table, 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 129-132, illus., table, 1968.

272-311 **Hultqvist, Bengt.** Auroras and polar substorms—Observations and theory, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 129-177, illus., 1969.

Hundhausen, A. J. See *Montgomery, Michael D. 264-325*

Hundhausen, A. J. See *Bame, S. J. 265-386*

273-330 **Hundhausen, A. J.; Bame, S. J.; Asbridge, J. R.** Plasma flow pattern in the Earth's magnetosheath: Jour. Geophys. Research, v. 74, no. 11, p. 2799-2806, illus., 1969.

273-339 **Hundhausen, A. J.; Gentry, R. A.** Numerical simulation of flare-generated disturbances in the solar wind: Jour. Geophys. Research, v. 74, no. 11, p. 2908-2918, illus., 1969.

Hunt, G. R. See *Salisbury, J. W. 271-046*

266-068 **Hunt, Graham R.; Salisbury, John W.; Vincent, Robert K.** Lunar eclipse—Infrared images and an anomaly of possible internal origin: Science, v. 162, no. 3850, p. 252-254, illus., 1968.

273-095 **Hunt, Graham R.; Vincent, Robert K.** The behavior of spectral features in the infrared emission from particulate surfaces of various grain sizes: Jour. Geophys. Research, v. 73, no. 18, p. 6039-6046, illus., 1968.

Hunt, T. M. See *Hatherton, T. 264-243*

Hunt, T. M. See *Cole, J. W. 274-375*

Hunten, Donald M. See *Belton, Michael J. S. 264-058*

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Hunter, J. A. See *Mereu, R. F. 272-252*

Hurley, P. M. See *Krogh, T. E. 269-001*

269-011 **Hurley, P. M.; Rand, J. R.** Review of age data in West Africa and South America relative to a test of continental drift, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 153-160, illus., 1968.

273-015 **Hurley, P. M.; Melcher, G. C.; Pinson, W. H., Jr.; Fairbairn, H. W.** Some orogenic episodes in South America by K-Ar and whole-rock Rb-Sr dating, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 633-638, tables, 1968.

Hurley, P. M. See *Fairbairn, H. W. 273-025*

273-230 **Hurley, Patrick M.; Rand, John R.** Pre-drift continental nuclei: Science, v. 164, no. 3885, p. 1229-1242, illus., tables, 1969.

274-406 **Hurst, C.** Reply to the letter by H. M. Iyer, "On Darbyshire's method of analyzing microseisms": Royal Astron. Soc. Geophys. Jour., v. 17, no. 4, p. 445-446, 1969.

Hurst, Vernon J. See *Allard, Gilles O. 269-291*

272-149 **Hurtig, E.** Zum Problem der Anisotropie petrophysikalischer Parameter in geologischen Körpern [On the problem of the anisotropy of petrophysical parameters in geologic bodies]: Geophysik. u. Geologie, no. 12, p. 3-36, illus., tables, 1968.

272-242 **Hurtig, E.** Ergebnisse von Wärmeleitfähigkeitsmessungen an Gesteinsproben aus de DDR im Rahmen complexer petrophysikalischer Untersuchungen [Results of heat conductivity measurements on rock samples from the German Democratic Republic in the framework of a program of petrophysical investigations]: Freiberger Forschungshefte C 238, p. 101-118, illus., 1968.

275-205 **Hurtig, Eckart.** Zur Deutung geophysikalischer Untersuchungsergebnisse über den Bau der sialischen Erdkruste [A concept for interpreting the geophysical structure of the sialic crust (with English abs.)]: Tectonophysics, v. 7, no. 2, p. 159-173, table, 1969.

274-089 **Husebye, E. S.** Direct measurement of dT/dΔ: Seismol. Soc. America Bull., v. 59, no. 2, p. 717-727, illus., tables, 1969.

Husebye, Eystein S. See *Jansson, Bo. 265-113*

270-363 **Hussin, J. J.** Geophysical surveys—Bedford Park Teachers College: South Australia Dept. Mines Mining Rev., no. 123, p. 68-71, illus., 1967.

269-256 **Hussin, James J.** Geophysical groundwater surveys, southern Yorke Peninsula, South Australia [with French and Spanish abs.], *in* Water for peace, V. 2, Water supply technology—Internat. Conf., Washington, D. C., 1967: Washington, D. C., U.S. Gov't. Printing Office, p. 869-875, illus., 1968.

Hussong, D. M. See *Furumoto, Augustine S. 268-310*

270-016 **Hutchinson, Charles Strachan.** Invalidity of the Billiton Granite, Indonesia, for defining the Jurassic/Upper Triassic boundary in the Thai-Malayan orogen: Geologie en Mijnbouw, v. 47, no. 1, p. 56-60, illus., 1968.

266-019 **Hutchison, Charles S.** The dating by thermoluminescence of tectonic and magmatic events in orogenesis, Chap. 6.3 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 341-358, illus., tables, 1968.

Hutchison, P. B. See *Weinberg, J. L. 267-394*

Hutchison, R. See *Leggo, P. J. 268-324*

Hutton, R. E. See *Choate, R. 268-079*

272-338 **Hutton, Rosemary.** Electromagnetic induction in the Earth by the equatorial electrojet: Nature, v. 222, no. 5191, p. 363-364, 1969.

265-228 **Hvozdara, Milan.** Electromagnetic induction in a half space with an oblique interface: Ceskoslovenska Akad. Ved Studia Geophys. et Geod., v. 12, no. 3, p. 304-320, illus., 1968.

Hyndman, D. W. See *Hyndman, R. D. 265-212*

265-212 **Hyndman, R. D.; Hyndman, D. W.** Water saturation and high electrical conductivity in the lower continental crust: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 427-432, illus., 1968.

271-015 **Hyyppa, E.; Heikkinen, A.; Toivonen, V.** Geological Survey of Finland radiocarbon measurements IV: Radiocarbon, v. 11, no. 1, p. 183-187, 1969.

Ianas, M. See *Constantinescu, Liviu. 265-364*

272-213 **Ianas, Mihail; Zorilescu, Dan.** Solution of the direct problem in gravimetry by means of the Monte Carlo method: Geoexploration, v. 6, no. 4, p. 245-249, table, 1968.

Ibragimov, R. N. See *Mavlyanov, G. A. 264-155*

275-128 **Ibrahim, Abou-Bakr K.** Determination of crustal thickness from spectral behavior of SH waves: Seismol. Soc. America Bull., v. 59, no. 3, p. 1247-1258, illus., tables, 1969.

264-125 **Ichihara, Matsuhei.** River structures, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 503-515, illus., tables, 1968.

271-518 **Ichikawa, Kanenori.** Seismic prospecting in the Oboke area, Shikoku [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 19, no. 6, p. 385-395, illus., tables, 1968.

Ichikawa, Yoneta. See *Higashimura, Takenobu. 266-026*

265-149 **Ichinohe, Tokio; Kato, Masaaki.** Tilting movement of the ground related to the Matsushiro earthquakes: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 143-149, illus., table, 1967.

267-609 **Ichiye, Takashi.** Marine geological research and exploration, Chap. 6, *in* Under-Sea Technology—Handbook, Directory, 1968: Arlington, Va., Compass Pubs., p. A39-A48, illus., 1968.

269-191 **Idriss, I. M.; Seed, H. Bolton.** An analysis of ground motions during the 1957 San Francisco earthquake: Seismol. Soc. America Bull., v. 58, no. 6, p. 2013-2032, illus., tables, 1968.

Idriss, Izzat M. See *Seed, H. Bolton. 270-071*

275-399 **Ignatieff, A.** A review of rock mechanics applications in Canadian bedded deposits: Canadian Mining and Metall. Bull., v. 61, no. 678, p. 1180-1184, 1968; Canadian Inst. Mining and Metallurgy Trans. 1968, v. 71, p. 290-294, 1968.

Ignatov, M. N. See *Ostistyy, B. K. 275-177*

Igoshin, B. L. See *Anan'yeva, Ye. M. 267-202*

275-179 **Igrevskiy, V. I.; Budnikov, N. P.; Kuchapin, A. V.** Perspektivy neftegazonosnosti sopredel'nykh rayonov Pol'skoy Narodnoy Respubliki i SSSR [Oil and gas prospects

of the adjacent regions of the Polish People's Republic and the U.S.S.R.]: Geologiya Nefti i Gaza, no. 3, p. 51-55, illus., 1969.

Igumnov, V. M. See *Vasilenko, N. N. 264-505*

264-117 **Iida, Kumizi.** The Niigata tsunami of June 16, 1964, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 97-127, illus., 1968.

269-286 **Iida, Kumizi.** Review of recent developments in geophysical exploration [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 3, p. 123-128, 1968.

Iida, Kumizi. See *Kasahara, Junzo. 272-161*

Iida, Kumizi. See *Kasahara, Junzo. 272-162*

Iida, Kumizi. See *Kasahara, Junzo. 272-163*

273-459 **Iida, Kumizi; Hattori, Sadaiku.** Seismic waves generated by small explosions, particularly wave frequencies related to charge amounts and problems determining underground structure from surface waves [in Japanese with English abs.]: Butsuri-Tanko, v. 22, no. 1, p. 1-10, illus., 1969.

Iida, Ryuichi. See *Ishii, Fumio. 272-508*

269-402 **Iijima, Takesi; Nagata, Takesi.** Constitution of polar magnetic disturbances: Rept. Ionosphere and Space Research Japan, v. 22, nos. 1-2, p. 1-24, illus., tables, 1968.

270-266 **Iijima, Takesi; Fukushima, Naoshi.** Worldwide geomagnetic change preceding the onset of auroral electrojet: Rept. Ionosphere and Space Research Japan, v. 22, no. 3, p. 161-172, illus., table, 1968.

273-359 **Iijima, Takesi.** Comparison of magnetic field variation on the ground, in the magnetosphere, and interplanetary space: Rept. Ionosphere and Space Research Japan, v. 22, no. 4, p. 295-300, illus., table, 1968.

265-635 **Iizuka, Susumu.** On seismic waves generated by explosions, [Pt.] 1 [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 18, no. 12, p. 831-842, illus., tables, 1967.

Iizuka, Susumu. See *Singh, Randhir. 268-341*

272-126 **Ikegami, Ryohei.** On the secular variation of magnitude-frequency relation of earthquakes, [Pt.] 2 [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 3, p. 190-201, illus., tables, 1968.

275-217 **Iliceto, Vittorio.** Mesures electriques sur le glacier de la Marmolada (Alpes orientales) [Electrical measurements on Marmolada Glacier (eastern Alps) (with English and Italian abs.)]: Com. Glaciol. Italiano Boll., ser. 2, no. 15, pt. 1, p. 71-90, illus., 1969.

265-305 **Il'in, A. V.** Proiskhozhdeniye rel'yefa materikovogo sklona Atlanticheskogo okeana [Origin of the relief of the continental slope of the Atlantic Ocean]: Akad. Nauk SSSR Izv. Ser. Geog., no. 3, p. 18-30, illus., 1968.

270-438 **Il'in, A. V.; Lisitsyn, A. P.** O proiskhozhdenii podvodnykh kan'onov v svyazi s osobennostyami ikh rasprostraneniya v Atlanticheskom okeane [On the occurrence of submarine canyons in connection with the features of their distribution in the Atlantic Ocean]: Akad. Nauk SSSR Doklady, v. 183, no. 3, p. 693-696, illus., 1968.

272-196 **Il'in, A. V.** O vertikal'nikh dvizheniyakh shel'fa Atlanticheskogo okeana v poslednikovoye vremya [On vertical movements of the shelf of the Atlantic

Ocean in post-glacial time]: Akad. Nauk SSSR Doklady, v. 182, no. 2, p. 422-425, illus., 1968.

Il'in, N. P. See *Florenskiy, K. P. 267-068*

Il'in, N. P. See *Vinogradov, A. P. 272-065*

265-296 **Illies, J. H.** Development and tectonic pattern of the Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 7-9, illus., 1967.

265-297 **Illies, J. H.** An attempt to model the Rhinegraben tectonics, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 10-12, illus., 1967.

Ilves, E. See *Punning, J. M. 265-020*

Ilves, E. See *Liiva, A. 265-029*

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Il'yasov, B. See *Grin, V. P. 269-207*

Imamoto, S. S. See *Paulikas, G. A. 265-384*

Imanov, A. A. See *Kuliyev, A. K. 268-589*

266-561 **Imbò, Giuseppe.** Alcune considerazioni sullo studio dei vulcani attivi italiani [Some considerations on the study of volcanic activity in Italy (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 16th Ann., Naples, 1967, Atti: Rome, Consiglio Nazionale Ricerche, p. 311-326, table, 1968.

270-443 **Imbò, Giuseppe; Gasparini, P.; Luongo, Giuseppe; Rapolla, Antonio.** Contributions to the volcanological researches by determination of the radioactivity of eruptive products: Bull. Volcanol., v. 32, no. 2, p. 317-341, illus., tables, 1968.

270-444 **Imbò, Giuseppe.** Behaviour of volatiles in the magmatic solutions and energetic implications: Bull. Volcanol., v. 32, no. 2, p. 343-351, illus., 1968.

270-445 **Imbò, Giuseppe; Luongo, Giuseppe.** Contribution of the knowledge of the magmatic evolution by the study of the variation of the coefficient viscosity: Bull. Volcanol., v. 32, no. 2, p. 365-375, illus., table, 1968.

270-450 **Imbò, Giuseppe; Casertano, Lorenzo; Napoleone, G.** Seismicity of Vesuvius on its present state of activity: Bull. Volcanol., v. 32, no. 2, p. 425-435, illus., 1968.

265-668 **Inami, Kazuo; Kakimi, Toshihiro.** On the relation between mudstone strengths of outcrop-samples and geologic structure [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 19, no. 1, p. 49-54, illus., table, 1968.

Ince, P. I. See *Sakamoto, N. 266-457*

268-140 **Indian Jour. Meteorology, Geophysics.** Scientific discussions on Koyna Earthquake: Indian Jour. Meteorology and Geophysics, v. 19, no. 1, p. 5-12, 1968.

267-570 **Indukayev, S. Ye.; Shpil'kov, A. P.** Izmeneniye skhemy aeroradiometra ARS-2 [Variation of the scheme of the ARS-2 airborne radiometer]: Geofiz. Apparatura, no. 34, p. 178-180, illus., 1967.

270-413 **Ingham, C. E.** The measurement of Young's modulus by seismic methods, *in* Australia-New Zealand Conf. on Soil Mechanics and Found. Eng., 5th, Auckland, New Zealand, 1967, Proc.: Petone, New Zealand, Sigma Press, Ltd., p. 9-13, illus., table, 1967.

Innes, M. J. S. See *Dence, M. R. 273-075*

270-105 **Innes, Richard B.** An interpreter's perspective on modern airborne-radar imagery, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 107-122, illus., 1968.

269-623 **Institut Français Petrole.** Development of new techniques by the French Petroleum Institute for underwater geological and geophysical studies, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 594-603, illus., 1967.

265-666 **Internat. Soc. Rock Mechanics.** (Organizing Committee). Enquiry on the research activities in the field of rock mechanics [with French and German texts], *in* Internat. Soc. Rock Mechanics Cong., 1st, Lisbon, 1966, Proc., V. 3: Lisbon, Portugal, Lab. Nac. Engenharia Civil, p. 627-671, table, 1967.

271-147 **International Upper Mantle Project.** (World Data Center A). Catalogue of data received by WDC-A during the period 1 January 1966-30 June 1967: Palisades, N. Y., Lamont Geol. Observatory, 84 p., 1967.

272-316 **Intriligator, Devrie S.; Wolfe, John H.; McKibbin, Darrell D.; Collard, Harold R.** Preliminary comparison of solar wind plasma observations in the geomagnetospheric wake at 1,000 and 500 earth radii: Planetary and Space Sci., v. 17, no. 3, p. 321-331, illus., 1969.

Iodko, V. K. See *Leonov, N. N. 265-171*

Ioffe, A. I. See *Belousov, I. M. 268-607*

Ioseliani, M. S. See *Tvaltvadze, G. K. 266-164*

266-492 **Ioseliani, M. S.; Makharadze, R. K.** Zithelcqaros magnituri anomaliis geologiuri interpretaciis sakithḫisathwis [On the problem of the geologic interpretation of the Tsiteltskaro magnetic anomaly (in Georgic with Russian summ.)]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 222-228, illus., 1966.

Ioseliani, M. S. See *Tvaltvadze, G. K. 266-529*

Iosif, S. See *Iosif, T. 265-137*

265-136 **Iosif, T.** Distribution des épicentres des séismes profonds de la région de Vrancea et structure du manteau supérieur [Distribution of epicenters of deep earthquakes of the Vrancea region and structure of the upper mantle]: Rev. Roumaine Géologie, Géophysique, Géographie, Ser. Géophysique, v. 12, no. 1, p. 23-38, illus., tables, 1968; Rumanian text, Acad. România Studii Cercetări Geologie, Geofizică, Geografie, Ser. Geofizică, v. 6, no. 1, p. 23-27, 1968.

265-137 **Iosif, T.; Iosif, S.** Spectrele underlor seismice ale cutremurelor adînci din Vrancea [Seismic wave spectrum from deep earthquakes of Vrancea]: Acad. România Geologie, Geofizică, Geografie, Ser. Geofizică, v. 6, no. 1, p. 49-60, illus., tables, 1968; Russian text, Rev. Roumaine Géologie, Géophysique, Géographie, Sér. Géophysique, v. 12, no. 1, p. 39-51, 1968.

268-135 **Iosif, T.** Distributia epicentrelor cutremurelor adînci din Vrancea şi structura mantalei superioare [Distribution of deep earthquake epicenters in Vrancea and the structure of the upper mantle]: Acad. România Studii şi Cercetări Geologie, Geofizică, Geografie, Ser. Geofizică, v. 6, no. 1, p. 23-37, illus., tables, 1968.

269-701 **Ipatenko, S. P.; Mayorova, S. N.** Sopostavleniye plotnostnoy i skorostnoy kharakteristik geologicheskogo razreza Turkmenii [Comparison of the density and velocity characteristics of the geologic section of Turkmenia]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 20-25, illus., table, 1968.

268-125 **Ipek, Muzaffer.** Research activities in the Seismological Institute of the Technical University of Istanbul, *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 55-57, table, 1968.

Irie, Tsuneji. See *Yoshizumi, Eizaburo. 265-231*

Irie, Tsuneji. See *Yoshizumi, Eizaburo. 265-232*

Iriyama, Jun. See *Shimazu, Yasuo. 266-389*

272-088 **Iriyama, Jun.** Thermal structure of the terrestrial planets [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 14-20, illus., table, 1968.

265-436 **Irving, E.; Roy, Jean L.** Intensite et stabilite d'aimantation des basaltes de l'Oregon et Washington et leurs applications a l'expansion du fond de l'ocean et a d'autres problemes geophysiques [Intensity and stability of magnetization of basalts of Washington and Oregon and their application to the expansion of the ocean floor and other geophysical problems (with English abs.)]: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 1, p. 907-913, illus., tables, 1968.

Irving, E. See *Briden, J. C. 268-400*

269-428 **Irving, E.; Robertson, W. A.** The distribution of continental crust and its relation to ice ages, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 168-177, illus., discussion, 1968.

270-269 **Irving, E.; Robertson, W. A.** Test for polar wandering and some possible implications: Jour. Geophys. Research, v. 74, no. 4, p. 1026-1036, illus., tables, 1969.

Irwin, William P. See *Lanphere, Marvin A. 264-019*

Isa, Kyozo. See *Morimoto, Ryohei. 270-455*

Isabayev, Ye. A. See *Kadyrov, N. B. 267-371*

Isacks, Bryan. See *Oliver, Jack. 265-347*

266-256 **Isacks, Bryan; Oliver, Jack; Sykes, Lynn R.** Seismology and the new global tectonics: Jour. Geophys. Research, v. 73, no. 18, p. 5855-5899, illus., table, 1968.

274-229 **Isacks, Bryan; Oliver, Jack; Sykes, Lynn R.** Reply [to comments by C. F. Richter on "Seismology and the new global tectonics" (1968)]: Jour. Geophys. Research, v. 74, no. 10, p. 2789-2790, 1969.

Isacks, Bryan. See *Mitronovas, Walter. 275-089*

275-103 **Isacks, Bryan; Sykes, Lynn R.; Oliver, Jack.** Focal mechanisms of deep and shallow earthquakes in the Tonga-Kermadec region and the tectonics of island arcs: Geol. Soc. America Bull., v. 80, no. 8, p. 1443-1469, illus., tables, 1969.

Isacks, Bryan L. See *Sykes, Lynn R. 275-088*

Isayev, V. S. See *Kondratovich, Yu. V. 270-389*

266-396 **Isayev, Ye. N.; Ushakov, S. A.** O korrelyatsionnoy svyazi moshchnosti bazal'tovogo sloya i nekotorykh fizicheskikh parametrov verkhney mantii [On the correlational relationship between thickness of the basaltic layer and some physical parameters of the upper mantle]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 87-90, illus., 1968.

Isayev, Ye. N. See *Gaynanov, A. G. 269-472*

Isayev, Ye. N. See *Verzhbitskiy, Ye. V. 269-473*

272-197 **Isayev, Ye. N.** O vyazkom techenii astenosfery pod ostrovnymi dugami [On viscous flow of the asthenosphere under island arcs]: Akad. Nauk SSSR Doklady, v. 184, no. 2, p. 406-409, illus., 1969.

273-209 **Isayev, Ye. N.; Kontarovich, R. S.; Ushakov, S. A.** O stroyenii kory razlichnykh zven'yev Kuril'skoy ostrovnoy dugi [On the crustal structure of the different units of the Kurile Island Arc], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 123-130, illus., 1968.

Isayev, Ye. N. See *Belov, Yu. P. 273-303*

274-365 **Ishida, Shiro; Maenaka, Kazuaki; Yokoyama, Takuo.** Paleomagnetic chronology of volcanic ash of the Plio-Pleistocene series in Kinki district, Japan—The research of younger Cenozoic strata in Kinki district, Pt. 12 [with Japanese abs.]: Geol. Soc. Japan Jour., v. 75, no. 4, p. 183-197, illus., tables, 1969.

Ishihara, Shunso. See *Shibata, Ken. 269-081*

272-508 **Ishii, Fumio; Iida, Ryuichi; Yugeta, Hideo; Kishimoto, Sadao; Tendou, Hisao.** Strength characteristics of layered bedrocks: Japan Public Works Research Inst. Jour. Research, v. 10, p. 135-158, illus., tables, 1965.

272-193 **Ishii, Hiroshi; Takagi, Akio.** Theoretical study on the crustal movements—Pt. 1, The influence of surface topography (two-dimensional SH-torque source): Tohoku Univ. Sci. Repts., Ser. 5, Geophysics, v. 19, no. 2, p. 77-94, illus., 1967.

272-194 **Ishii, Hiroshi; Takagi, Akio.** Theoretical study on the crustal movements—Pt. 2, The influence of horizontal discontinuity: Tohoku Univ. Sci. Repts., Ser. 5, Geophysics, v. 19, no. 2, p. 95-106, illus., 1967.

Ishii, Yoshiharu. See *Yagi, Norio. 274-163*

265-639 **Ishii, Yoshinori.** On the recent offshore seismic reflection techniques [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 1, p. 17-24, illus., 1968.

269-620 **Ishii, Yoshinori.** A seismic model study on buried focus, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 529-540, illus., 1967.

Ishii, Yoshinori. See *Takeuchi, Hitoshi. 269-625*

273-003 **Ishizaka, K.** Zircon ages of Hida and Ryoke metamorphic terrains, Japan: Carnegie Inst. Washington Year Book 67, p. 376-377, table, 1969.

Ishizaka, Kyoichi. See *Matsumoto, Tatsuro. 273-017*

270-384 **Ishutin, V. V.; Kolobayeva, Z. V.; Lobastova, L. I.; Plokhikh, O. I.** Glubinnoye geologicheskoye stroyeniye Vostochnogo Ustyurta (po dannym seysmicheskikh issledovaniy KMPV) [Deep geologic structure of eastern Ust-Urt (according to data of seismic refraction investigations)]: Sovetskaya Geologiya, no. 7, p. 86-96, illus., tables, 1968.

265-064 **Iskanderova, A. D.** Sovremennoye sostoyaniye svintsovogo metoda opredeleniya absolyutnogo vozrasta [Present status of the lead method of absolute age determination], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 93-111, illus., 1967.

Iskanderova, A. D. See *Mirkina, S. L. 265-065*

266-576 **Iskenderov, V. G.; Abdullayev, A. P.** O vliyanii chastotnoy kharakteristiki karotazhnykh registratorov na srednekvadratichnuyu oshibku izmereniya pri provedenii radioaktivnogo karotazha skvazhin [On the effect of the frequency characteristic of the logging recorders on the mean square error of measurement in conducting radioactive well logging]: Vyssh. Ucheb. Zavedeniy Izv., Neft' i Gaz, no. 6, p. 10-13, illus., 1968.

Isobe, Hiroshi. See *Morimoto, Ryohei. 270-455*

271-163 **Isotov, A. A.** On establishment of the system of coordinates related to the Earth's axis of rotation: Bull. Géod., no. 88, p. 147-150, 1968.

274-372 **Ispir, Y.; Kolcak, D.** To compute families of anomaly curves for two-dimensional magnetic bodies: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 243-245, illus., 1969.

Istomin, V. Ye. See *Moiseyenko, U. I. 270-155*

274-472 **Itenberg, S. S.; Koithara, J.; Hashmy, K. H.** The status of well log interpretation in India, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. C1-C14, illus., 1969.

Ito, Kosuke. See *Hirasawa, Kiyoshi. 265-633*

Ito, Yutaka. See *Okada, Atusi. 266-319*

Ito, Yutaka. See *Tsubokawa, Ietsune. 266-320*

Ivanchuk, A. M. See *Mayorov, V. V. 270-392*

Ivanchuk, L. F. See *Dolina, L. P. 275-447*

Ivanov, A. P. See *Khrychev, B. A. 267-332*

267-067 **Ivanov, A. V.; Florenskiy, K. P.** Kosmicheskiye shariki v nizhnepermskikh solyanykh otlozheniyakh [Cosmic spherules in Lower Permian salt deposits]: Geokhimiya, no. 4, p. 483-485, illus., 1968.

Ivanov, A. V. See *Florenskiy, K. P. 267-068*

Ivanov, A. V. See *Florenskiy, K. P. 267-069*

Ivanov, I. A. See *Varkovetskiy, M. B. 270-200*

Ivanov, I. B. See *Shanin, L. L. 267-041*

Ivanov, I. I. See *Matveyev, V. G. 268-568*

264-057 **Ivanov, K. G.** Nature of the effect of the Tunguska fall on the upper atmosphere, the geomagnetic field, and airglow: Geomagnetism and Aeronomy, v. 7, no. 6, p. 836-839, illus., 1967.

264-358 **Ivanov, K. G.; Mikerina, N. V.** Geomagnetic storm of April 1-2, 1964, at the surface of the Earth and in the tail of the magnetosphere—Instability of the neutral sheet: Geomagnetism and Aeronomy, v. 7, no. 6, p. 840-843, illus., 1967.

264-370 **Ivanov, K. G.** Oblique incidence of streams on the magnetosphere: Geomagnetism and Aeronomy, v. 8, no. 1, p. 19-22, illus., 1968.

267-425 **Ivanov, K. G.; Mikerina, N. V.** Method of determining the Sq variation and the system of Sq currents in the ionosphere: Geomagnetism and Aeronomy, v. 8, no. 2, p. 297-299, illus., 1968.

Ivanov, K. G. See *Troitskaya, V. A. 273-369*

Ivanov, K. P. See *Arkhangel'skiy, N. I. 267-335*

268-444 **Ivanov, M. M.; Novysh, V. V.; Finger, D. L.** Rezul'taty i zadachi Sovetskikh issledovaniy geomagnitnogo polya v mirovom okeana [Results and tasks of Soviet investigations of the geomagnetic field in the World Ocean (with English summ.)]: Okeanologiya, v. 8, no. 3, p. 363-373, illus., 1968.

271-395 **Ivanov, M. M.; Tsutskarev, B. M.** O vozmozhnosti ispol'zovaniya metodov radioastronomii dlya magnitnykh izmereniy [On the possibility of using methods of radioastronomy for magnetic measurements]: Geofiz. Apparatura, no. 31, p. 167-175, illus., tables, 1967.

Ivanov, M. M. See *Alekseyev, G. V. 274-381*

Ivanov, M. V. See *Grinenko, V. M. 269-385*

Ivanov, N. A. See *Avchyan, G. M. 265-450*

267-454 **Ivanov, N. A.** Ispol'zovaniye paleomagnitnykh metodov dlya opredeleniya nekotorykh elementov tektoniki gornykh porod Urala [Use of paleomagnetic methods to determine some elements of the tectonics of the rocks of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 52-54, 1968.

269-446 **Ivanov, N. A.; Shapiro, V. A.; Undzenkov, B. A.** Izmeneniye ostatochnoy namagnichennosti zalezhi magnetita posle vzryva [Change in remanent magnetization of a magnetite deposit after an explosion]: Akad. Nauk SSSR Doklady, v. 177, no. 2, p. 322-324, illus., 1967.

Ivanov, N. A. See *Shapiro, V. A. 275-340*

268-442 **Ivanov, S. S.** Ob opredelenii glubiny zaleganiya nizhney granitsy magnitnykh poley [On the determination of the depth of the lower boundary of magnetic fields]: Moskov. Univ. Vestnik, ser. 4, no. 5, p. 114-117, illus., 1968.

273-279 **Ivanov, S. S.** O simmetrii vnutrennikh morey [On the symmetry of interior seas], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 257-261, illus., 1968.

Ivanov, S. S. See *Belov, Yu. P. 273-301*

Ivanov, S. S. See *Belov, Yu. P. 273-303*

Ivanov, S. S. See *Gorodnitskiy, A. M. 273-400*

Ivanov, S. S. See *Gorodnitskiy, A. M. 273-403*

270-524 **Ivanov, V. F.; Lyubavin, Yu. P.; Tyvin, L. I.** Osobennosti primeneniya uskoritel'nykh trubok UNG-2 v skvazhinnykh generatorakh neytronov [Features of the application of UNG-2 accelerating tubes in borehole neutron generators]: Geofiz. Apparatura, no. 36, p. 88-95, illus., tables, 1968.

265-472 **Ivanov, V. G.; Natadze, A. L.** Analiz peredatochnykh svoystv magnitometra s ferrozondovym datchikom [Analysis of the transfer properties of a magnetometer with fluxgate sensor]: Geofiz. Apparatura, no. 27, p. 93-100, illus., 1966.

270-146 **Ivanov, V. M.; Krotman, L. S.; Shvetsov, B. A.** Moshchnyy tranzistornyy klyuch k apparature dlya kartirovaniya metodom perekhodnykh protsessov [A powerful transistor switch for apparatus for mapping by the transient processes method]: Geofiz. Apparatura, no. 36, p. 163-165, illus., 1968.

271-557 **Ivanov, V. V.; Kononov, V. I.; Sugrobov, V. M.** Main regularities of the formation of hydrothermal waters in the regions of recent volcanism, *in* Internat. Geol. Cong., 23d, Proc., Prague, 1968, Symposium 2, Genesis of mineral and thermal waters: Prague, Academia, p. 151-159, tables, 1968.

275-433 **Ivanov, V. V.** Osnovnyye geokhimicheskiye obstanovki i protsessy formirovaniya gidroterm oblastey sovremennogo vulkanizma [Fundamental geochemical settings and processes of formation of hot springs in regions of recent volcanism], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 240-259, tables, 1964.

Ivanov, Yu. A. See *Alekseyeva, V. I. 270-511*

Ivanova, E. I. See *Syromyatnikov, N. G. 267-369*

Ivanova, G. M. See *Konstantinova, A. G. 273-149*

267-065 **Ivanova, I. A.; Lebedinets, V. N.; Maksakov, B. I.; Pornyagin, Yu. I.** Izucheniye skorosti ispareniya kamennykh meteoritov sravitel'nym metodom [Study of the rate of evaporation of stony meteorites by a comparative method]: Geokhimiya, no. 2, p. 239-242, illus., table, 1968.

Ivanova, L. A. See *Vasil'yev, Yu. I. 273-145*

Ivanova, V. I. See *Dobrev, T. B. 272-384*

Ivantsov, Yu. F. See *Tal'virskiy, B. B. 275-373*

Ivanyukovich, G. A. See *Artsybashev, V. A. 270-519*

267-644 **Ivashchenko, G. A.; Medovoy, M. M.** O vozmozhnosti izucheniya raspredeleniya seysmicheskikh voln v verkhney chasti sredy po dannym obrashchennogo mikroseysmokarotazha [On the possibility of studying the propagation of seismic waves in the upper part of a medium on the basis of data of reversed microseismic logging]: Akad. Nauk Turkmen SSR Izv., Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 3, p. 58-62, illus., 1968.

Ivashchuk, A. I. See *Kostyuk, O. P. 265-164*

Iverson, Robert M. See *Henderson, Garry C. 267-082*

Iveson, P. R. See *Dunham, K. C. 274-010*

Iwabuchi, Yoshio. See *Hoshino, Michihei. 264-548*

267-613 **Iwabuchi, Yoshio.** Topography of trenches east of the Japanese Islands [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 74, no. 1, p. 37-46, illus., 1968.

Iwasaki, B. See *Iwasaki, I. 268-317*

268-317 **Iwasaki, I.; Katsura, T.; Ozawa, T.; Yoshida, M.; Iwasaki, B.** Chlorine content of volcanic rocks and migration of chlorine from the mantle to the surface of the Earth, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 423-427, illus., tables, 1968.

266-504 **Iwasaki, Iwaji; Ozawa, Takejiro; Yoshida, Minoru; Kanda, Hiroshi; Yamaya, Kazuhisa.** The change in the radon (Rn-222) and thoron (Rn-220,Tn) contents of the volcanic gases in the Oowakudani District, Hakone Volcano from 1960 to 1967 [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 1, p. 21-31, illus., tables, 1968.

Iwata, Takayuki. See *Hagiwara, Takahiro. 266-133*

Iyengar, K. T. Sundara Raja. See *Iyengar, R. Narayana. 275-091*

275-091 **Iyengar, R. Narayana; Iyengar, K. T. Sundara Raja.** A nonstationary random process model for earthquake accelerograms: Seismol. Soc. America Bull., v. 59, no. 3, p. 1163-1188, illus., tables, 1969.

267-110 **Iyer, H. M.** Determination of frequency-wave-number spectra using seismic arrays: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 97-117, illus., table, 1968.

274-405 **Iyer, H. M.** On Darbyshire's method of analyzing microseisms: Royal Astron. Soc. Geophys. Jour., v. 17, no. 4, p. 443-444, 1969.

Iyer, S. S. See *Venkatasubramanian, V. S. 275-008*

271-219 **Izokh, E. P.** Mnogofaznyye magmaticheskiye serii, ikh proiskhozhdeniye, otnosheniye k tektonike kory i podkorovym protsessam [Polyphase magmatic series, their origin, relationship to crustal tectonics and subcrustal processes (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 223-228, 1968.

Izumi, M. See *Hisada, T. 268-127*

Izutsuya, Sadakatsu. See *Morimoto, Ryohei. 270-455*

Izutuya, Sadakatu. See *Miyamura, Setumi. 266-318*

Izutuya, Sadakatu. See *Okada, Atusi. 266-319*

Izutuya, Sadakatu. See *Tsubokawa, Ietsune. 266-320*

Izutuya, Sadakatu. See *Kubotera, Akira. 275-235*

265-647 **Izvarin, Yu. I.** Ob ispol'zovanii elektronno-vychislitel'nykh mashin pri postroyenii seysmicheskikh razrezov po dannym MRNP [On the use of computers in plotting seismic sections from data of the controlled direction pickup method]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 37-41, illus., 1968.

266-237 **Izyumov, I. F.; Morozova, G. M.** O vliyanii vmeshchayushchey sredy v metode perekhodnykh protsessov [On the effect of the enclosing medium in the method of transient processes]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 3, p. 97-102, illus., tables, 1968.

Izyumov, I. F. See *Antonov, Yu. N. 269-714*

265-404 **Jacka, F.; Bond, F. R.** Optical auroral morphology [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 547-553, illus., 1968.

Jacka, F. See *Kilfoyle, B. P. 267-398*

275-130 **Jackson, David D.** Elastic relaxation model for seismic wave attenuation in the Earth: Physics Earth and Planetary Interiors, v. 2, no. 1, p. 30-34, illus., table, 1969.

268-334 **Jackson, E. D.** The character of the lower crust and upper mantle beneath the Hawaiian Islands, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 135-150, illus., table, 1968.

268-044 **Jackson, Everett D.; Wilshire, Howard G.** Chemical composition of the lunar surface at the Surveyor landing sites: Jour. Geophys. Research, v. 73, no. 24, p. 7621-7629, illus., tables, 1968.

Jackson, Frederick C. See *Greenwood, J. Arthur. 273-169*

Jackson, Frederick C. See *Greenwood, J. Arthur. 273-170*

Jackson, M. L. See *Syers, J. K. 265-369*

Jackson, M. L. See *Rex, R. W. 269-376*

266-508 **Jackson, Philip L.** Sectional correlograms and convolutions by a simple optical method: Geophysics, v. 33, no. 5, p. 747-754, illus., 1968.

Jacobs, J. A. See *Dosso, H. W. 264-165*

264-335 **Jacobs, J. A.; Wright, C. S.** Some features of geomagnetic micropulsations observed during the recent quiet solar years, with particular reference to data obtained at the near conjugate stations of Great Whale River and Byrd: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 53-67, illus., 1968.

265-399 **Jacobs, J. A.; Watanabe, T.** Conjugate points phenomena associated with energetic particles, magnetic observations: Annales Geophysique, v. 24, no. 2, p. 467-475, illus., 1968.

Jacobs, J. A. See *Kitamura, T. 268-381*

Jacquin, Jean-Pierre. See *Cuong, Nguyen Ba. 265-595*

Jaeger, Emil. See *Miller, Donald S. 264-010*

267-315 **Jaeger, J. C.** Cooling and solidification of igneous rocks, *in* Basalts—The Poldervaart treatise on rocks of basaltic composition, V. 2 (H. H. Hess and A. Poldervaart, editors): New York and London, Interscience Publishers, p. 503-536, illus., tables, 1968.

270-214 **Jaeger, Jean-Louis.** Un alignement d'anomalies légères coincidant avec des bassins tertiaires en Bretagne [An alinement of slight anomalies coincident with Tertiary basins in Brittany], *in* Contribution de la carte gravimétrique à la géologie du Massif Armoricain: [France] Bur. Recherches Géol. et Minières Mém., no. 52, p. 91-102, illus., 1967.

270-215 **Jaeger, Jean-Louis; Corpel, J.** Étude de l'anomalie gravimétrique lègére en relation avec le bassin tertiaire de Rennes [Study of the slight gravimetric anomaly related to the Tertiary basin of Rennes], *in* Contribution de la carte gravimétrique à la géologie du Massif Armoricain: [France] Bur. Recherches Géol. et Minières Mém., no. 52, p. 103-129, illus., 1967.

Jaeger, R. R. See *Lipschutz, M. R. 273-047*

264-053 **Jaeger, Ralph R.; Lipschutz, Michael E.** X-ray diffraction study of kamacite from iron meteorites: Geochim. et Cosmochim. Acta, v. 32, no. 7, p. 773-779, illus., 1968.

264-062 **Jaffe, L. D.** Surveyor 6 lunar mission: Jour. Geophys. Research, v. 73, no. 16, p. 5297-5300, table, 1968.

267-075 **Jaffe, L. D.; Steinbacher, R. H.** Introducion—Surveyor 5 science results: Jour. Geophys. Research, v. 73, no. 22, p. 7161-7164, illus., 1968.

267-076 **Jaffe, L. D.** (and others). Principal science results from Surveyor 5: Jour. Geophys. Research, v. 73, no. 22, p. 7165-7167, 1968.

Jaffe, L. D. See *Steinbacher, R. H. 268-076*

268-077 **Jaffe, L. D.** (and others). Principal science results from Surveyor VII, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 5-7, illus., 1968.

Jaffe, L. D. See *Choate, R. 268-079*

275-069 **Jaffe, L. D.; Steinbacher, R. H.** Introduction, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 1-13, illus., 1969.

275-070 **Jaffe, L. D.** (and others). Principal science results from the Surveyor project, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 15-19, 1969.

275-079 **Jaffe, L. D.; Rennilson, J. J.** Effects of lunar particles on spacecraft mirror surfaces, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 451-457, illus., 1969.

268-102 **Jaffe, Leonard D.** Scientific results of the Surveyor I lunar landing, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 91-118, illus., 1968.

273-096 **Jaffe, Leonard D.** The Surveyor lunar landings: Science, v. 164, no. 3881, p. 774-788, illus., tables, 1969.

274-052 **Jaffe, Leonard D.** Lunar surface material—Spacecraft measurements of density and strength: Science, v. 164, no. 3887, p. 1514-1516, illus., table, 1969.

271-129 **Jagannadaha Sarma, V. V.** Effect of tank walls in geoelectrical model experiments: Indian Geophys. Union Jour., v. 4, no. 2, p. 93-98, illus., 1967.

264-173 **Jagannadha Sarma, V. V.; Bhaskara Rao, V.** Electrical prospecting for water in parts of Andhra Pradesh, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 66-76, illus., table, 1966.

Jagannadha Sarma, V. V. See *Babu Rao, V. 264-174*

264-189 **Jagannadha Sarma, V. V.** Studies on the effect of temperatures on electrical resistivity of waters, river sands, and quartz powders, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 163-170, illus., tables, 1966.

269-052 **Jäger, E.; Niggli, E.** Geological meaning of Rb-Sr age results as studied on samples from the Central Alps, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 509-514, illus., 1967.

268-019 **Jäger, Emilie; Zwart, H. J.** Rb-Sr age determinations of some gneisses and granites of the Aston-Hospitalet massif (Pyrenees): Geologie en Mijnbouw, v. 47, no. 5, p. 349-357, illus., tables, 1968.

Jäger, Emilie. See *Schmidt, Klaus. 268-021*

Jäger, Emilie. See *Miller, Donald S. 268-022*

266-050 **Jain, Anant V.; Lipschutz, Michael E.** Implications of shock effects in iron meteorites: Nature, v. 220, no. 5163, p. 139-143, illus., table, 1968.

273-117 **James, D. E.; Sacks, I. S.; Lazo, E.; Aparicio, P.** On locating local earthquakes using small station networks: Carnegie Inst. Washington Year Book 67, p. 344-353 illus., 1969.

273-318 **James, D. E.; Sacks, I. S.** Upper mantle structure beneath western South America: Carnegie Inst. Washingington Year Book 67, p. 353-357, illus., 1969.

275-093 **James, David E.; Sacks, I. Selwyn; Lazo L., Eduardo; Aparicio G., Pablo.** On locating local earthquakes using small networks: Seismol. Soc. America Bull., v. 59, no. 3, p. 1201-1212, illus., 1969.

269-401 **James, R. W.** Multipole analysis—[Pt.] 1, Theory, and geomagnetic multipoles 1965.0: Australian Jour. Physics, v. 21, no. 4, p. 455-464, tables, 1968.

273-215 **James, R. W.** Transformation of spherical harmonics under change of reference frame: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 305-316, 1969.

275-317 **James, R. W.** On the significance of multipole axes: Pure and Appl. Geophysics, v. 74, p. 23-24, 1969.

Janák, František. See *Hrouda, Frantisek. 274-362*

270-161 **Jančíc, Toplica.** Osvrt na fizička svokstva kompleksnih ruda gvožđa i okolnih stena u zapadnoj Makedoniji i na mogučnost primene geofizičkih metoda [Review of the physical properties of the complex iron ore and country rock in western Macedonia and on the possibilities of using geophysical methods (with English summ.)]: Inst. Geol.-Rud. Istraživanja i Istpitivanja Nukleranih i Drugih Mineral. Sirovina Radovi, v. 3, p. 117-124, tables, 1967.

Jankowski, Jerzy. See *Guterch, Aleksander. 271-319*

265-113 **Jansson, Bo; Husebye, Eystein S.** Application of array data processing techniques to a network of ordinary seismograph stations: Pure and Appl. Geophysics, v. 69, p. 80-99, illus., tables, 1968.

Japan Soc. Promotion Science. See *National Science Foundation. 273-131*

Jarosch, H. See *Ben-Menahem, Ari. 269-186*

274-035 **Jarosewich, Eugene; Mason, Brian.** Chemical analyses with notes on one mesosiderite and seven chondrites: Geochim. et Cosmochim. Acta, v. 33, no. 3, p. 411-416, table, 1969.

Järvimäki. See *Puranen, M. 268-298*

264-065 **Jastrow, Robert.** The planet Venus: Science, v. 160, no. 3835, p. 1403-1410, illus., 1968.

Javoy, Marc. See *Allegre, Claude Jean. 266-032*

Javoy, Marc. See *Allegre, Claude-J. 274-300*

274-301 **Javoy, Marc; Allègre, Claude-J.** Étude de la composition O-18:O-16 de quelques éclogites – Consequences petrologiques et geophysiques [Study of the O-18:O-16 composition of some eclogites – Petrologic and geophysical consequences]: Soc. Géol. France Bull., 1967, ser. 7, v. 9, no. 6, p. 800-808, illus., table, 1968.

270-088 **Jeffreys, Harold.** The variation of latitude: Royal Astron. Soc. Monthly Notices, v. 141, no. 2, p. 255-268, tables, 1968.

269-696 **Jeffries, F.; Reichl, F. E.** Imperial Oil using wireline logs for computer evaluation of oil reserves: Canadian Petroleum, v. 9, no. 12, p. 32-37, illus., 1968.

270-462 **Jeffries, F. S.** A computer test for errors in acoustic-type logs: Log Analyst, v. 7, no. 2, p. 13-16, illus., table, 1966.

270-466 **Jeffries, F. S.** Computer correlation of wireline log parameters and core analysis parameters: Log Analyst, v. 7, no. 3, p. 6-14, illus., 1966.

270-467 **Jeffries, F. S.** A self-taught computer program to interpret micrologs: Log Analyst, v. 7, no. 3, p. 15-30, illus., 1966.

270-478 **Jeffries, Frank.** Reservoir volume calculations with a well data system: Log Analyst, v. 9, no. 3, p. 3-11, illus., tables, 1968.

Jenkins, Ralph E. See *Granberry, Raymond J. 272-538*

270-465 **Jenkins, Ralph J.** Accuracy of porosity determinations: Log Analyst, v. 7, no. 2, p. 29-34, illus., tables, 1966.

Jennings, Paul C. See *Nigam, Navin C. 274-096*

264-313 **Jensen, M. L.** Stable isotopes and the origin of uranium deposits of Utah, *in* Uranium districts of southeastern Utah: Utah Geol. Soc. Guidebook to Geology of Utah, no. 21, p. 78-90, illus., 1967.

Jensen, O. G. See *Russell, R. D. 267-103*

Jeong, Ki Chang. See *Lee, Dang Hoon. 267-168*

Jeong, Kichang. See *Kim, Chulmin. 274-185*

265-677 **Jesch, A.** Nagymélységű fúrások szelvényszese [Logging of ultradeep boreholes]: Magyar Geofizika, v. 9, no. 2, p. 60-68 illus., 1968.

271-192 **Jessen, A.** Experiments in hydrostatic leveling: Bull. Geod., no. 89, p. 301-302, 1968.

Joensuu, O. See *Fisher, David E. 275-260*

269-066 **Johnsen, S. J.** 4π low-level beta counter using two Si-Au detectors, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 721-726, illus., 1967.

Johnsen, S. J. See *Dansgaard, W. 270-202*

Johnsen, S. J. See *Dansgaard, W. 275-213*

271-566 **Johnson, A. I.** An outline of geophysical logging methods and their use in hydrologic studies, *in* Selected techniques in water resources investigations, 1966-67: U.S. Geol. Survey Water-Supply Paper 1892, p. 158-164, table, 1968.

Johnson, G. Leonard. See *Watson, Jerry A. 270-428*

272-517 **Johnson, G. Leonard; Closuit, Al W.; Pew, James A.** Geologic and geophysical observations in the northern Labrador Sea [with French and Russian abs.]: Arctic, v. 22, no. 1, p. 56-68, illus., 1969.

Johnson, G. R. See *Anderson, L. A. 273-165*

Johnson, Gerald W. See *Teller, Edward. 275-133*

272-276 **Johnson, H. E.; Axford, W. I.** Production and loss of He-3 in the Earth's atmosphere: Jour. Geophys. Research, v. 74, no. 9, p. 2433-2438, illus., table, 1969.

270-457 **Johnson, Hamilton M.** The role of the log analyst: Log Analyst, v. 7, no. 1, p. 21-24, 1966.

272-062 **Johnson, J. E.; McColl, D. H.** An aerolite from Cockburn, South Australia: Royal Soc. South Australia Trans. 1967, v. 91, p. 37-39, 1967.

Johnson, J. G. See *Boucot, Arthur J. 269-299*

274-100 **Johnson, Lane R.** Array measurements of P velocities in the lower mantle: Seismol. Soc. America Bull., v. 59, no. 2, p. 973-1008, illus., tables, 1969.

266-363 **Johnson, Noye M.** Determination of magma temperatures from natural thermoluminescence, Chap. 10.2 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 545-546, 1968.

Johnson, Noye M. See *Likens, Gene E. 273-307*

268-112 **Johnson, Rockne H.; Norris, Roger A.; Duennebier, Frederick K.** Abyssally generated *T* phases, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 70-78, illus., table, 1968.

Johnson, Rockne H. See *Norris, Roger A. 269-685*

275-228 **Johnson, Stanley S.; Palmer, C. Sweet.** Magnetic and gravity surveys of Albemarle and Fluvanna Counties, Virginia: Virginia Div. Mineral Resources Rept. Inv. 20, 10 p., illus., 1969.

271-378 **Johnson, William W.** A least-squares method of interpreting magnetic anomalies caused by two-dimensional structures: Geophysics, v. 34, no. 1, p. 65-74, illus., tables, 1969.

265-216 **Joiner, T. J.; Warman, J. C.; Scarbrough, W. L.** Reply to Adel A. R. Zohdy's discussion of "An evaluation of some geophysical methods for water exploration in the Piedmont area" (1968): Ground Water, v. 6, no. 4, p. 39-40, illus., 1968.

Jonášová, V. See *Marusiak, I. 264-575*

Jones, Austin E. See *Boucher, Gary. 275-084*

Jones, B. P. See *Vitkus, G. 268-081*

268-045 **Jones, Billy P.** Density-depth model for the lunar outermost layer: Jour. Geophys. Research, v. 73, no. 24, p. 7631-7635, illus., table, 1968.

269-694 **Jones, Bob.** The use of Rw and Sh log-derived values in oil and gas exploration programs, *in* Black Hills area, South Dakota, Montana, Wyoming—Wyoming Geol. Assoc., 20th Field Conf., 1968, Guidebook: Casper, Wyo., Petroleum Inf., p. 101-105, illus., 1968.

270-463 **Jones, C. D.** Case histories of drill stem testing as a part of an effective formation evaluation program: Log Analyst, v. 7, no. 2, p. 17-24, illus., 1966.

Jones, D. E. See *Ballif, J. R. 272-302*

273-345 **Jones, D. E.; Smith, E. J.; Davis, L., Jr.; Coleman, P. J.** Search for a lunar wake at large distances from the Moon—Mariner 4: Jour. Geophys. Research, v. 74, no. 11, p. 3037-3041, illus., 1969.

Jones, D. E. See *Ballif, J. R. 274-310*

Jones, D. E. See *Ballif, J. R. 274-311*

267-434 **Jones, D. L.** Paleomagnetism of the Premier Mine kimberlite: Jour. Geophys. Research, v. 73, no. 22, p. 6937-6944, illus., tables, 1968.

Jones, D. L. See *Murthy, G. S. 269-431*

Jones, Douglas E. See *Coleman, Paul J., Jr. 273-333*

268-537 **Jones, E. J. W.** Continuous reflection profiles from the European continental margin in the Bay of Biscay: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 127-134, illus., 1968.

271-509 **Jones, E. J. W.; Funnell, B. M.** Association of a seismic reflector and upper Cretaceous sediment in the Bay of Biscay: Deep-Sea Research, v. 15, no. 6, p. 701-709, illus., 1968.

Jones, Everett N. See *Browning, David G. 267-574*

271-124 **Jones, F. W.; Ku, C. C.; Geldart, L. P.** Earth currents and magnetic field variations in the period range 10-200 s: Royal Astron. Soc. Geophys. Jour., v. 17, no. 1, p. 15-38, illus., 1968.

272-166 **Jones, F. W.; Geldart, L. P.** Spectral analysis of vertical and horizontal earth current components at separated locations: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1512-1517, illus., 1968.

275-308 **Jones, F. W.** Periodic variations in micropulsation dominant period: Physics Earth and Planetary Interiors, v. 2, no. 1, p. 50-54, illus., 1969.

Jones, Frank C. See *Birmingham, Thomas J. 265-377*

271-195 **Jones, L.; Auwelant, Van den.** Nouveaux instruments de nivellement de precision pour observation en station fixe [New precision leveling instruments for observation at a fixed station]: Bull. Géod., no. 90, p. 401-406, illus., 1968.

273-103 **Jones, Meirion T.** A single-color investigation into the uniformity of the light-scattering properties of the lunar surface: Icarus, v. 10, no. 1, p. 66-89, illus., 1969.

Jones, R. H. See *Choate, R. 268-079*

267-093 **Jordan, P.** Zur Deutung des lunaren Alpentals [The significance of the lunar Alpine Valley]: Naturwissenschaften, v. 55, no. 5, p. 225, 1968.

Joyner, B. F. See *Sutcliffe, H., Jr. 269-693*

Joyner, Gerald. See *Adams, Richard M. 267-610*

268-047 **Jurgens, R. F.** Radar scattering from Venus at large angles of incidence and the question of polar ice caps: Science, v. 162, no. 3860, p. 1388-1390, illus., 1968.

Jůzek, Milan. See *Gruntorad, Jan. 264-176*

Jůzek, Milan. See *Gruntorad, Jan. 273-181*

275-197 **Kääriäinen, Erkki.** Leveling, *in* Geodeettinen Laitos (The Finnish Geodetic Institute), 1918-1968: Suomen Geod. Lait. Jul. (Finnish Geod. Inst. Pubs.), no. 65, p. 69-76, illus., tables, 1969.

269-229 **Kaarsberg, Ernest A.** Elasticity studies of isotropic and anisotropic rock samples: Soc. Mining Engineers Trans., v. 241, no. 4, p. 470-475, illus., 1968.

Kaarsberg, Ernest A. See *Sturm, Rolland G. 270-431*

271-245 **Kabanova, R. V.** O svyazi noveyshikh tektonicheskikh dvizheniy so strukturnym planom tsentral'noy chasti territorii KMA [On the relationship of recent tectonic movements to the structural plan of the central part of the territory of the Kursk Magnetic Anomaly], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktu zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 162-167, illus., 1968.

Kachalo, I. P. See *Anan'yev, F. M. 264-319*

Kadomura, Hiroshi. See *Nakano, Takamasa. 265-301*

Kadono, Koe. See *Okada, Atusi. 266-319*

Kadono, Koe. See *Tsubokawa, Ietsune. 266-320*

265-422 **Kadukhin, G. F.; Kushenkov, A. F.; Taranichev, B. V.; Ulanov, O. I.** Semiautomatic installation for processing magnetograms: Geomagnetism and Aeronomy, v. 8, no. 1, p. 120-123, illus., 1968.

269-641 **Kadykov, Yu. A.** O vozmoshnosti sovmestnogo ispol'zovaniya prodol'nykh i obmennykh voln pri interpretatsii seysmicheskikh materialov [On the possibility of joint use of longitudinal and converted waves in interpretation of seismic data]: Razved. Geofizika, no. 26, p. 34-38, illus., 1968.

267-371 **Kadyrov, N. B.; Isabayev, Ye. A.; Asylbayev, U. Kh.; Abil'dayev, A. Kh.; Cherdyntsev, V. V.** Izotopnyy sostav urana i soderzhaniya aktiniya v mineralakh i prirodnykh vodakh [Isotopic composition of uranium and actinium content in minerals and natural waters]: Geokhimiya, no. 4, p. 492-495, table, 1968.

Kagami, Hideo. See *Sato, Takahiro. 264-546*

273-148 **Kagan, Ya. Ya.** Issledovaniye energii seysmoakusticheskikh impul'sov, voznikayushchikh pri razrushenii ugol'nogo plasta [Investigation of the energy of seismoacoustic pulses arising upon breakdown of a coal seam]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 37-46, illus., tables, 1969.

Kahle, Anne B. See *Vestine, E. H. 264-333*

274-319 **Kahle, Anne B.; Ball, R. H.; Cain, J. C.** Prediction of geomagnetic secular change confirmed: Nature, v. 223, no. 5202, p. 165, illus., table, 1969.

Kahle, Anne B. See *Ball, R. H. 275-257*

Kahn, J. S. See *Braun, R. L. 273-478*

Kaila, K. L. See *Narain, Hari. 265-353*

269-185 **Kaila, K. L.; Reddy, P. R.; Narain, Hari.** P-wave travel times from shallow earthquakes recorded in India and inferred upper mantle structure: Seismol. Soc. America Bull., v. 58, no. 6, p. 1879-1897, illus., tables, 1968.

274-091 **Kaila, K. L.** A new analytical method for finding the upper mantle velocity structure from P and S wave travel times of deep earthquakes; Seismol. Soc. America Bull., v. 59, no. 2, p. 755-769, illus., tables, 1969.

Kaipov, R. L. See *Blankov, Ye. B. 272-563*

Kaiser, T. R. See *Bullough, K. 272-319*

265-303 **Kaitera, Pentti.** A földkéreg terhelésében bekövetkező változások hatása a kéregmozgásokra [The effect of variations due to crustal loading on crustal movements]: Geofiz. Közlemények, v. 17, nos. 1-2, p. 117-118, 1968.

266-549 **Kaizuka, S.** Classification of tephra units and tephrochronology in Japan, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 283-289, tables, 1968.

271-081 **Kajiura, Kinjiro; Aida, Isamu; Hatori, Tokutaro.** An investigation of the tsunami which accompanied the Hyuganada earthquake of April 1, 1968 [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 1149-1168, illus., tables, 1968.

Kakhiani, L. A. See *Tskhakaya, A. D. 265-166*

Kakimi, Toshihiro. See *Inami, Kazuo. 265-668*

272-267 **Kakuta, Toshiki.** The structure of the upper mantle—In the vicinity of the low velocity layer [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 3, p. 202-221, illus., table, 1968.

Kalaburdina, A. I. See *Anan'yeva, Ye. M. 267-202*

Kalafus, R. M. See *Ewen, H. I. 270-100*

264-183 **Kalashnikov, N. I.; Kuzovkin, S. K.** K voprosu o klassifikatsii metodov aeroelektrorazvedki [On the problem of classifying airborne electrical survey methods]: Geofiz. Apparatura, no. 33, p. 103-110, illus., 1967.

274-200 **Kalashnikov, N. I.** Ustroystvo dlya kompensatsii pervichnogo signala v aeroelektrorazvedke metodom induktsii [Device for compensating the primary signal in airborne electrical surveying by the induction method], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 80-83, illus., 1965.

Kalashnikov, N. I. See *Goncharskiy, V. N. 274-202*

269-698 **Kalashnikov, Yu. A.** Primeneniye metoda yestestvennogo elektricheskogo polya v skvazhinnom variante pri poiskakh polimetallicheskikh mestorozhdeniy na Rudnom Altaye [Application of the method of the natural electrical field in the borehole variant in prospecting for polymetallic deposits in the Rudnyy Altay]: Razved. i Okhrana Nedr, no. 10, p. 27-34, illus., 1968.

267-630 **Kalinin, A. V.; Azimi, Sh. A.; Kalinin, V. V.; Pivovarov, B. L.** Vliyaniye dispersii fazovoy skorosti na izmereniye srednykh i interval'nykh skorostey metodami seysmicheskogo i ul'trazvukovogo karotazha [Effect of phase velocity dispersion on measurements of average and interval velocities by the methods of seismic and ultrasonic logging]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 79-84, tables, 1968.

Kalinin, A. V. See *Azimi, Sh. A. 275-368*

Kalinin, V. A. See *Zharkov, V. N. 271-320*

Kalinin, V. N. See *Znamenskiy, V. V. 271-524*

Kalinin, V. V. See *Kalinin, A. V. 267-630*

Kalinin, V. V. See *Azimi, Sh. A. 275-368*

268-391 **Kalinin, Yu. D.** Glavnoye geomagnitnoye pole i magnitosfera Zemli [The main geomagnetic field and the Earth's magnetosphere]: Itogi Nauki, Ser. Geofizika, 1966, p. 27-50, 1968.

271-243 **Kalinina, A. M.** Razvitiye rel'yefa vostochnogo sklona Urala v noveysheye vremya [Development of the relief of the east flank of the Urals in recent time], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 151-158, illus., table, 1968.

Kalinina, R. A. See *Kozlov, Ye. A. 268-557*

Kalinina, R. A. See *Kholin, A. I. 273-220*

265-421 **Kalinowska, Zofia; Czyszek, W.; Przybyszewski, E.** Świder, Hel, and Belsk three-hour-range indices K and magnetic character figures C for January to March, 1967: Acta Geophys. Polonica, v. 15, no. 4, p. 399-401, tables, 1967.

Kalisher, A. L. See *Shchepetnov, P. V. 264-382*

Kallaur, T. N. See *Golinskiy, G. L. 265-168*

274-451 **Kalterherberg, Jakob.** Ingenieurgeologische Untersuchungen in Gefrierschächten [Engineering geological research in frozen strata (with English and French abs.)], *in* Beiträge zur Ingenieurgeologie — A symposium: Fortschr. Geologie Rheinland u. Westfalen, v. 15, p. 291-324, illus., 1968.

Kalyuzhnaya, L. T. See *Sollogub, V. B. 270-401*

Kamaletdinov, M. A. See *Bilalov, R. S. 267-199*

265-249 **Kamenetskaya, R. M.** Ob oprobovanii induktsionnogo sposoba opredeleniya elektroprovodnosti rud v usloviyakh yestestvennogo zaleganiya [On testing an induction method of determining the electrical conductivity of ores in place]: Razved. Geofizika, no. 24, p. 60-64, illus., 1967.

273-397 **Kamenetskaya, R. M.** Magnitnogo pole kol'tsa peremennogo toka nad provodyashchim magnitnym dvusloynum poluprostranstvom [Magnetic field of an alternating-current ring above a conducting magnetic two-layered half space]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 11, p. 138-140, illus., 1968.

268-189 **Kamenetskiy, F. M.** Neustanovivshayesya pole vikhrevykh tokov v provodyashchey magnitnoy sfere [The nonsteady field of eddy currents in a conducting magnetic sphere]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 11, p. 125-127, illus., 1968.

274-197 **Kamenetskiy, F. M.; Timofeyev, V. M.** Zavisimost' rezul'tatov nablyudeniy ot formy impul'sa vozbuzhdeniya pri pryamykh poiskakh khorosho provodyashchikh rud metodom stanovleniya polya [Dependence of the results of observations on the shape of the exciting pulse in direct prospecting for good conducting ores by the field buildup method], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 59-68, illus., 1965.

264-573 **Kamenev, S. P.; Nichiporuk, V. A.** Opredeleniye neftegazonasyshchennosti peshchanykh kollektorov po dannym karotazha [Determination of oil and gas saturation of sandy reservoirs from logging data]: Prikladnaya Geofizika, no. 50, p. 198-205, illus., table, 1967.

268-633 **Kamenev, S. P.** K otsenke glinistosti peschanykh kollektorov po dannym karotazha [On the estimation of the clay content of sandy reservoirs on the basis of logging data]: Prikladnaya Geofizika, no. 53, p. 142-148, illus., 1968.

Kamenskiy, I. L. See *Mamyrin, B. A. 272-287*

269-615 **Kametani, Takuya.** Problems of interpreting seismic data, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 482-487, illus., 1967.

Kaminskaya, A. B. See *Shergina, Yu. P. 272-296*

275-111 **Kaminuma, Katsutada; Eto, Tsuneo; Yoshida, Mitsuo.** Seismological observation at Syowa Station, Antarctica [in Japanese with English abs.]: Antarctic Rec., no. 33, p. 65-70, illus., table, 1968.

266-135 **Kanai, Kiyoshi; Suzuki, Tomisaburo.** Expectancy of the maximum velocity amplitude of earthquake motions at bed rock [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 663-666, illus., 1968.

Kanai, Kiyoshi. See *Yoshizawa, Shizuyo. 266-136*

266-140 **Kanai, Kiyoshi; Tanaka, Teiji; Suzuki, Tomisaburo; Osada, Kaio; Yoshizawa, Shizuyo; Morishita, Toshizo.** Observational study of ground vibrations caused by compressors [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 773-781, illus., tables, 1968.

266-141 **Kanai, Kiyoshi; Tanaka, Teiji; Suzuki, Tomisaburo.** A short note on abnormal earthquake damage and microtremors [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 783-790, illus., tables, 1968.

Kanai, Kiyoshi. See *Tanaka, Teiki. 271-080*

265-333 **Kanamori, Hiroo; Fujii, Naoyuki; Mizutani, Hitoshi.** Thermal diffusivity measurement of rock-forming minerals from 300° to 1,100°K: Jour. Geophys. Research, v. 73, no. 2, p. 595-605, illus., tables, 1968.

Kanamori, Hiroo. See *Anderson, Don L. 266-382*

271-313 **Kanamori, Hiroo.** Travel times to Japanese stations from Longshot and their geophysical implications [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 841-859, illus., 1968.

271-315 **Kanamori, Hiroo; Abe, Katsuyuki.** Deep structure of island arcs as revealed by surface waves [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 1001-1025, illus., tables, 1968.

264-520 **Kanareykin, B. A.** K voprosu o vozmozhnostyakh seysmorazvedki metodom otrazhennykh voln pri izuchenii vyklinivayushchikhsya sloyev v usloviyakh Zapadno-Sibirskoy nizmennosti [Problem of the possibilities of seismic surveying by the method of reflected waves in the study of pinch-out beds under the conditions of the West Siberian Lowland]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 39-53, illus., 1964.

264-478 Kanasewich, E. R. Precambrian rift—Genesis of strata-bound ore deposits: Science, v. 161, no. 3845, p. 1002-1004, illus., 1968.

Kanasewich, E. R. See *Russell, R. D. 266-417*

267-346 **Kanasewich, E. R.** The interpretation of lead isotopes and their geological significance, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 147-224, illus., tables, 1968.

268-339 **Kanasewich, E. R.; Clowes, R. M.** Geophysical studies of the Earth's crust and upper mantle in western Canada, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 239-247, illus., 1968.

Kanasewich, E. R. See *Cumming, G. L. 274-426*

Kanasewich, E. R. See *Russell, R. D. 275-297*

Kanda, Hiroshi. See *Iwasaki, Iwaji. 266-504*

272-122 **Kanda, Sigeru.** History of large earthquakes in Kanagawa Prefecture [in Japanese]: Zisin, ser. 2, v. 21, no. 2, p. 139-140, table, 1968.

Kandle, J. R. See *McCulloh, T. H. 272-539*

264-564 Kane, Armour. Some solutions to logging problems on the west side of California's San Joaquin Valley, *in* Geology and oil fields, west side southern San Joaquin Valley- AAPG, SEG, and SEPM, Pacific Secs., 43d Ann. Mtg., 1968, Guidebook: [Los Angeles, Calif.] Am. Assoc. Petroleum Geologists, Pacific Sec., p. 43-48, illus., 1968.

270-453 **Kane, Julian.** Iceland's thermal geology: Nat. History, v. 78, no. 1, p. 48-51, illus., 1969.

272-203 **Kane, M. F.; Bromery, R. W.** Gravity anomalies in Maine, Chap. 31 *in* Studies of Appalachian geology, northern and marine (Zen, E-an, and others, editors): New York and London, Interscience Publishers, p. 415-423, illus., 1968.

274-244 **Kaneko, Shiro.** Right-lateral faulting in Miura Peninsula south of Tokyo, Japan [with Japanese abs.]: Geol. Soc. Japan Jour., v. 75, no. 4, p. 199-208, illus., 1969.

Kaneoka, I. See *Ozima, M. 264-404*

Kaneoka, I. See *Ozima, M. 264-406*

264-036 **Kaneoka, Ichiro; Ozima, Minoru; Ozima, Mituko; Ayukawa, Masaru; Nagata, Takesi.** K-Ar ages and palaeomagnetic studies on rocks from the east coast of Lützow-Holm Bay, Antarctica [with Japanese abs.]: Antarctic Rec., no. 31, p. 12-20, illus., tables, 1968.

Kanevskiy, Z. M. See *Chizov, O. P. 264-241*

269-390 **Kannangara, M. L. T.; Fernando, P. C. B.** Nighttime equatorial Pi 2 micropulsations: Jour. Geophys. Research, v. 74, no. 3, p. 844-852, illus., 1969.

265-140 **Kano, Hiroshi; Nakagawa, Hisao; Oide, Keishi; Oike, Shoji; Matsuyama, Tsutomu; Nanasaki, Osamu.** Land-slidings and slumpings by the 1968 Tokachi-oki earthquake in the Hachinohe district, Aomori Prefecture [in Japanese]: Geol. Soc. Japan Jour., v. 74, no. 7, p. 401-402, illus., 1968.

271-392 **Kantorivich, V. L.; Midtsev, B. F.; Shilov, V. A.** Vibratsionnaya pogreshnost' aeromagnitometra [Vibration error of the airborne magnetometer]: Geofiz. Apparatura, no. 31, p. 40-47, illus., 1967.

268-171 **Kantsel', A. V.; Laverov, N. P.; Rozanov, Yu. A.; Tolkunov, A. Ye.; Turlychkina, L. M.** Ob ispol'zovanii dannykh o fiziko-mekhanicheskikh svoystvakh vulkanogennykh porod dlya resheniya voprosov ikh genezisa [On the use of data on the physicomechanical properties of volcanogenic rocks to solve problems of their genesis], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 280-285, tables, 1968.

Kapitonova, S. A. See *Kostina, A. F. 265-165*

266-334 **Kapitsa, A. P.** Podlednyye rel'yef Antarktidy [Subglacial relief of Antarctica]: Akad. Nauk SSSR Mezhduvedomstv. Geofiz. Kom., Rezul'taty Issledovaniy po Mezhdunarod. Geofiz. Proyektam, 100 p., illus., tables, 1968.

266-579 **Kapkanshchikova, I. A.; Stetsyak, M. S.** Sravitel'naya otsenka promyslovogeofizicheskikh metodov opredeleniya koeffitsiyentov otkrytoy poristosti [Comparative assessment of geophysical well logging methods of determining the coefficients of open porosity (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 119-126, illus., tables, 1967.

268-645 **Kapkanshchikova, I. A.** Opredeleniye glinistosti porod po dannym gammametoda i potentsialov sobstvennoy polyarizatsii [Determination of the clay content of rocks from data of the gamma method and self potentials (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 46-50, illus., 1968.

Kapkanshchikova, I. A. See *Davidenko, F. K. 275-452*

Kaplan, B. L. See *Mayorov, V. V. 270-392*

275-018 **Kaplan, G.** Analyse géochronologique de quelques roches plutoniennes de la péninsule du Cap York (Queensland-Australie) [Geochronologic analysis of some plutonic rocks of the Cape York Peninsula (Queensland, Australia)]: Centre Recherches Pau Bull., v. 2, no. 2, p. 399-409, illus., table, 1968.

Kaplan, I. R. See *Presley, B. J. 267-349*

Kaplan, I. R. See *Goldberg, Edward D. 270-249*

Kaplan, I. R. See *Ben-Yaakov, S. 272-516*

265-339 **Kappelmeyer, O.** The geothermal field of the Upper Rhinegraben, *in* The Rhinegraben progress report 1967 (J. P. Rothe and K. Sauer, editors): Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 101-103, 1967.

267-306 **Karachkovskaya, A. N.** Predvaritel'nyye dannyye po termolyuminestsentsii fenakita [Preliminary data on the thermoluminescence of phenacite]: Geokhimiya, no. 4, p. 500-502, table, 1968.

265-448 **Karaczun, Konstanty.** Możliwości zastosowania badán paleomagnetycznych w zagadnieniach geofizycznych i geologicznych [Possibility of applying paleomagnetic research in geophysical and geological studies (with English and Russian summ.)]: Przegląd Geol., v. 16, no. 6 (183), p. 293-298, 1968.

268-029 **Karapetyan, A. I.** O vozraste i rudonosnosti Tsakhashatskoy (Takyarlinskoy) intruzii Pambakskogo rudnogo rayona Armyanskoy SSR [On the age and ore-bearing capability of the Tsakhkashat (Takyarla) intrusion of the Pambak ore region of the Armenian S.S.R.]: Akad. Nauk Armyan. SSR Doklady, v. 46, no. 4, p. 192-194, 1968.

Karapetyan, B. K. See *Medvedev, S. V. 270-084*

271-537 **Karapetyan, B. K.** Mnogomayatnikovyye seysmometry i rezul'taty ikh primeneniya v inzhenernoy seysmologii [Multipendulum seismometry and results of its use in engineering seismology]: Yerevan, Aypetrat, 178 p., illus., tables, 1963.

266-244 **Kara, Gyula; Zsille, Antal; Kremszner, Miklós.** Tájékoztató a magyar geofizikusok 1967. evi mongoliai kutatásairól [Report on exploration in Mongolia by Hungarian geophysicists in 1967]: Magyar Geofizika, v. 9, no. 3, p. 113-119, illus., 1968.

264-184 **Karasev, A. P.; Krivonosenko, N. I.** Posledovatel'nosti tranzistornyy pereklyuchatel' [Sequential transistor changeover switch]: Geofiz. Apparatura, no. 33, p. 173-176, illus., 1967.

270-149 **Karasev, A. P.; Krivonosenko, N. I.; Seyfullin, R. S.** Opyt primeneniya apparatury dlya izucheniya ranney stadii vyzvannoy polyarizatsii [Attempt to use apparatus for studying the early stages of induced polarization]: Geofiz. Apparatura, v. 36, p. 81-87, illus., 1968.

Karasik, A. M. See *Demenitskaya, R. M. 265-360*

Karasik, A. M. See *Demenitskaya, R. M. 269-470*

273-398 **Karasik, A. M.** Magnitnyye anomalii khrebta Gakkelya i proiskhozhdeniye Yevraziyuskogo subbasseyna Severnogo Ledovitogo okeana [Magnetic anomalies of the Gakkel Ridge and origin of the Eurasian sub-basin of the Arctic Ocean], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad Nauchno-Issled. Inst. Geologii Arktiki, p. 8-19, illus., 1968.

270-388 **Karasik, V. M.** K postroyeniyu otrazhayushchikh granits sposobom zasechek [On plotting reflecting boundaries by the method of intersections]: Razved. Geofizika, no. 29, p. 33-40, illus., 1968.

Karasik, V. M. See *Merkulov, V. I. 270-534*

266-395 **Karatayev, G. I.; Shechkov, B. N.; Kegeleva, N. A.** Izucheniye poverkhnosti Mokhorovichicha po dannym gravimetrii i poverkhnostnykh seysmicheskikh voln [Stud of the Mohorovicic surface on the basis of data of gravimetry and seismic surface waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 83-86, illus., tables, 1968.

268-268 **Karatayev, G. I.; Chernyy, A. V.** Korrelyatsiya model' interpretatsii gravitatsionnykh i magnitnykh anomaliy i metody proverki geologo-geofizicheskikh gipoteza [Correlational model of interpretation of gravity and magnetic anomalies and methods of checking a geological-geophysical hypothesis], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 159-169, 1968.

269-339 **Karatayev, G. I.; Chernyy, A. V.** Korrelyatsionnaya model' interpretatsii gravitatsionnykh i magnitnykh anomaliy i metody proverki geologo-geofizicheskikh gipotez [Correlational model of interpretation of gravity and magnetic anomalies and methods of checking geologic and geophysical hypotheses (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 103-112, 1968.

Karatayev, G. I. See *Fotiadi, E. E. 273-222*

Karatayev, G. I. See *Fotiadi, E. E. 275-237*

268-289 **Karatayev, G. L.** Nekotoryye prilozheniya metoda statisticheskoy linearizatsii k resheniyu zadach gravirazvedki i magnitorazvedki [Some applications of the method of statistical linearization to the solution of problems of gravity and magnetic surveying], *in* Prilozheniye nekotorykh metodov matematiki k interpretatsii geofizicheskikh dannykh: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologiya i Geofiziki (Izdatel'stvo "Nauka" Sibirskoye Otdeleniye), p. 76-91, 1967.

Karchevskiy, Zh. See *Troitskaya, V. A. 274-338*

Karig, D. E. See *Peterson, D. L. 267-251*

268-585 **Karl, F.; Kern, H.** Uber Beanspruchung und Verformung von Gesteinen—[Pt.] 2, Rotationssymmetrische und echt dreiachsige Verformungen an Marmoren [On stress and deformation of rocks—[Pt.] 2, Axial symmetric and real triaxial deformation of marbles (with English abs.)]: Contr. Mineralogy and Petrology, v. 18, no. 3, p. 199-224, illus., 1968.

Karl, F. See *Kern, H. 268-586*

266-004 **Karlstrom, T. N. V.** The Quaternary time scale—A current problem of correlation and radiometric dating, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 121-150, illus., tables, 1968.

269-153 **Karlstrom, Thor N. V.** Long-range program of systematic geologic exploration of the Moon, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 131-143, illus., tables, 1968.

272-374 **Karmanova, N. P.** Results of paleomagnetic study of Triassic formations in the central Urals [translated from Russian, *in* Nastoyashcheye i proshloye magnitnogo polya zemli: Moscow, Izdatel'stvo "Nauka," p. 250-253, 1965]: Canada Defense Board Directorate Sci. Inf. Services [Rept.] T480R, 4 p., illus., 1967.

267-057 **Karner, Frank R.** Meteorites in North Dakota—A guide to their recognition: North Dakota Geol. Survey Misc. Ser. 37, 8 p., illus., 1968.

266-114 **Kárník, Vít; Hübnerova, Zdeňka.** The probability of occurrence of largest earthquakes in the European area: Pure and Appl. Geophysics, v. 70, no. 2, p. 61-73, illus., tables, 1968.

264-590 **Karpinskaya, N. N.; Shmekker, M. Sh.; Chutko, Ye. B.** O geofizicheskikh issledovaniyakh v Severoluganskoy opornoy skvazhine [On geophysical investigations in the North Lugan stratigraphic borehole]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 10, p. 291-298, table, 1965.

264-595 **Karpinskaya, N. N.; Shmekker, M. S.** O fizicheskikh svoystvakh otlozheniy v rayone Khar'kovskom opornoy skvazhiny [On the physical properties of the formations in the vicinity of the Kharkov stratigraphic borehole]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 13, p. 152-162, illus., 1965.

264-597 **Karpinskaya, N. N.; Shmekker, M. Sh.** O geofizicheskikh issledovaniyakh v Khar'kovskoy opornoy skvazhine [On geophysical investigations in the Kharkov stratigraphic borehole]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 14, p. 123-131, table, 1965.

268-530 **Kartashov, N. P.** Ekspress-metod opredeleniya kontsentratsii radiya-A i skrytoy energii v vozdukhe, soderzhashchem radon [Rapidmethod of determining the concentration of radium-A and hidden energy in air containing radon], *in* Yadernogeofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 49-55, illus., tables, 1967.

270-395 **Kartavtsev, S. M.** Analogovoye ustroystvo dlya osushchestvleniya prostranstvennogo napravlennogo priyema seysmicheskikh voln [Analog apparatus for accomplishing spatial directional pickup of seismic waves]: Geofiz. Apparatura, no. 36, p. 109-118, illus., table, 1968.

Kartha, T. D. Krishna. See *Williams, John A. 272-100*

Kartsivadze, G. K. See *Tvaltvadze, G. K. 266-164*

Kartvelishvili, K. M. See *Aleksidze, M. A. 266-351*

Kartvelishvili, K. M. See *Balavadze, B. K. 266-354*

266-173 **Kartvelishvili, K. Z.** Nablyudeniya nad prilivnymi deformatsiyami Zemli v Tbilisi [Observations on tidal deformations of the Earth at Tbilisi]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 87-96, tables, 1966.

Karyakin, Ye. D. See *Grushinskiy, N. P. 265-332*

272-161 **Kasahara, Junzo; Suzuki, Isao; Kumazawa, Mineo; Kobayashi, Yoji; Iida, Kumizi.** Anisotropism of P-wave in dunite [in Japanese with English abs.]: Zisin, ser. 2 v. 21, no. 3, p. 222-228, illus., 1968.

272-162 **Kasahara, Junzo; Suzuki, Isao; Kumazawa, Mineo; Iida, Kumizi.** Anisotropism of S-wave in dunite [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 3, p. 229-236, illus., tables, 1968.

272-163 **Kasahara, Junzo; Suzuki, Isao; Kumazawa, Mineo; Iida, Kumizi.** Plane and spherical wave velocities and energy flow in anisotropic media [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 4, p. 282-292, illus., table, 1968.

266-134 **Kasahara, Keichi; Okada, Atusi; Shibano, Mutsuro; Sasaki, Koichi; Matsumoto Shigeo; Hirai, Masayo.** Electro-optical measurement of horizontal strains accumulating in the swarm earthquake area, [Pt.] 4 [with Japanese abs.]: Tokyo Univ Earthquake Research Inst. Bull., v. 46, pt. 3, p. 651-661, illus., tables, 1968.

266-138 **Kasahara, Keichi; Okada, Atusi; Shibano, Mutsuro; Sasaki, Koichi; Matsumoto Shigeo; Hirai, Masayo.** Observation of horizontal strain accumulation by electro-optical means—[Pt.] 2, Resurvey in central Honshu, Japan for the period May, 1966 March, 1968 [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 741-758, illus., tables, 1968.

275-105 **Kasahara, Keichi; Stevens, Anne E.** (editors). A symposium on processes in the focal regionCInternat. Union Geodesy and Geophysics, 14th Gen. Assembly, Zurich, 1967: Dominion Observatory Ottawa Pubs., v. 37, no. 7, p. 183-235, illus., tables, 1969.

275-106 **Kasahara, Keichi.** Focal processes, and various approaches to their mechanism [with French abs.], *in* A symposium on processes in the focal region—Internat. Union Geodesy and Geophysics, 14th Gen. Assembly, Zurich, 1967: Dominion Observatory Ottawa Pubs., v. 37, no. 7, p. 187-189, illus., 1969.

268-307 **Kashkay, M. A.; Aliyev, S. A.; Tagiyev, I. I.** Gidrotermal'naya zona Masally-Lenkoran'-Astara [The Masally-Lenkoran'-Astara hydrothermal zone]: Akad. Nauk Azerbaydzhan. SSR Izv. Nauk o Zemle, no. 3, p. 3-19, illus., tables, 1968.

271-206 **Kashkay, M. A.** Geneticheskaya svyaz' vulkanizma i drugikh yavleniy s poperechnymi strukturami (na primere Kavkaza-Kryma) [Genetic relationship of volcanism and other phenomena to transverse structures (illustrated by the Caucasus and Crimea) (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "-Nauka," p. 54-57, 1968.

271-232 **Kashmenskaya, O. V.; Khvorostova, Z. V.** Metodika vyyavleniya blokovykh neotektonicheskikh dvizheniy na primere gornoy chasti basseyna rek Kolymy i Indigirki [Procedure for bring-out neotectonic block movements illustrated by the mountain part of the basin of the Kolyma and Indigirka rivers], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 72-78, illus., 1968.

274-209 **Kashprovskiy, V. Ye.** Grozy kak istochnik voln sverkhnizikh chastot v geologorazvedke [Thunderstorms as a source of ultralow-frequency waves in geological surveying], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 138-164, illus., 1965.

Kasimov, R. S. See *Zubkova, V. B. 269-713*

266-520 **Kasimzade, M. S.; Guseynov, Kh. F.** Eksperimental'noye issledovaniya elektrokineticheskikh seysmopriyemnikov davleniya [Experimental investigation of electrokinetic seismic pressure pickups]: Razved. Geofizika, no. 25, p. 33-38, illus., 1968.

270-127 **Kašpar, M.** Messapparatur für neuen radiotechnischen Bohrlochverfahren [Measuring apparatus for new radiotechnical borehole procedures]: Freiberger Forschungshefte, C 226, p. 113-119, illus., 1967.

Kasparov, V. A. See *Aramirzoyev, R. A. 265-167*

Kaspárov, V. A. See *Agamirozoyev, R. A. 268-148*

Kasser, P. See *Bauer, A. 268-251*

273-263 **Katili, John A.; Hehuwat.** On the occurrence of large transcurrent faults in Sumatra, Indonesia, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 5-17, illus., 1967.

Kato, Masaaki. See *Ichinohe, Tokio. 265-149*

Kato, Munehiko. See *Sato, Hisayoshi. 267-627*

268-426 **Kato, Yoshio; Takagi, Akio; Muroi, Isao.** Aeromagnetic survey in northeast Japan, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 212-217, illus., 1968.

Kato, Yoshio. See *Giesecke, Alberto A. 269-406*

272-349 **Kato, Yoshio; Tanaka, Minoru; Sato, Yoshiaki.** On the characteristics of the beating type geomagnetic pulsations in Pc 3 range: Tohoku Univ. Sci. Repts., Ser. 5, Geophysics, v. 19, no. 2, p. 45-75, illus., tables, 1967.

266-153 **Kats, A. Z.** Seysmicheskiye kolebaniya vodoslivnoy chasti zemlyanoy plotiny [Seismic vibration of the spillway part of an earth dam], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 100-106, illus., 1967.

265-207 **Kats, S. A.** Prokhodyashchiye i otrazhennyye volny v tonkosloistoy srede [Traveling and reflected waves in a thin-layered medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 50-64, illus., 1968.

Katsiashvili, N. A. See *Nodia, M. Z. 265-427*

Katsiashvili, N. A. See *Nodia, M. Z. 267-428*

273-183 **Katsube, T.** The electro-chemical transient phenomena of ore and rock samples—[Pt.] 2, An investigation of measuring apparatus and of transient phenomena of electrodes [in Japanese with English abs.]: Butsuri-Tanko, v. 22, no. 1, p. 21-33, illus., tables, 1969.

274-412 **Katsura, Kyozo; Hatuda, Zin-itiro.** Distribution of radon content of gas associated with spring waters at Awara Hot Springs [in Japanese with English abs.]: Balneol. Soc. Japan Jour., v. 19, nos. 3-4, p. 105-110, illus., table, 1968.

Katsura, T. See *Iwasaki, I. 268-317*

Katsura, T. See *Forbes, Robert B. 270-435*

269-162 **Katterfel'd, G. N.; Hédervári, Péter.** Kol'tsevyye i lineynyye struktury Marsa [Circular and linear structures of Mars (with English summ.)]: Astron. Zhur., v. 45, no. 5, p. 1091-1100, illus., tables, 1968.

269-166 **Katterfeld, G. N.; Frolov, P. M.** Zemnyye analogi v gidroareologii [Terrestrial analogies in hydroareology (with English summ.)]: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 201-211, illus., tables, 1968.

269-172 **Katterfel'd, G. N.** Morfogenezis kol'tsevykh struktur Luny—Statisticheskiy i sravitel'no-geologicheskiy analiz [Morphogenesis of the ring structures of the Moon—Statistical and comparative-geological analysis (with English abs., German summ.)]: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 117-155, illus., tables, 1968.

Katterfel'd, G. N. See *Benes, Konrad. 269-176*

269-317 **Katterfeld, G. N.; Boneff, N.** Sur les lois de la distribution et des contours des continents et des oceans [On the laws of distribution and the outlines of the continents and oceans [with English abs.]: Ostrava [Czechoslovakia] Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 51-58, 1968.

271-342 **Katz, Alan H.** Electron density variations in the southern hemisphere topside ionosphere during a magnetic storm: Jour. Atmos. and Terrest. Physics, v. 31, no. 3, p. 463-468, illus., table, 1969.

Katz, Eli Joel. See *McDonald, Martin F. 274-453*

269-046 **Kaufhold, J.; Herr, W.** Influence of experimental factors on dating natural and man-made glasses by the fission track methods, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 403-413, illus., table, 1967.

75-274 **Kaufman, A.** The Th-232 concentration of surface ocean water: Geochim. et Cosmochim. Acta, v. 33, no. 6, p. 717-724, illus., tables, 1969.

67-190 **Kaufman, A. A.; Morozova, G. M.** O glubinnosti metoda stanovleniya polya pri otnositel'no malykh raznosakh [On the depth of penetration of the field buildup method in the case of relatively small spacings]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 5, p. 101-104, 1968.

67-191 **Kaufman, A. A.; Tabarovskiy, L. A.** Peremennoye elektromagnitnoye pole ploskoy volny nad pologimi dvukhmernymi strukturami [Alternating electromagnetic field of a plane wave over gentle two-dimensional structures]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 74-82, illus., 1968.

Kaufman, M. I. See *Osmond, J. K. 267-340*

74-313 **Kaufmann, Richard L.; Konradi, Andrei.** Explorer 12 magnetopause observations—Large-scale nonuniform motion: Jour. Geophys. Research, v. 74, no. 14, p. 3609-3627, illus., table, 1969.

66-018 **Kaul, I. K.; Bhattacharya, P. K.; Tolpadi, S.** Factors in age determination by thermoluminescence of smoky quartz, Chap. 6.2 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 327-340, illus., tables, 1968.

71-157 **Kaula, W. M.** Comments on paper by M. A. Khan, "A re-evaluation of the theory for the hydrostatic figure of the Earth" [1968]: Jour. Geophys. Research, v. 74, no. 6, p. 1710, 1969.

70-049 **Kaula, William M.** An introduction to planetary physics—The terrestrial planets: New York and London, John Wiley and Sons, Inc., 490 p., illus., tables, 1968.

74-354 **Kaula, William M.** Comment on paper by P. Goldreich and A. Toomre, "Some remarks on polar wandering" [1969]: Jour. Geophys. Research, v. 74, no. 10, p. 2568-2569, 1969.

Kausel, E. See *Olea M., R. 273-319*

74-030 **Kaushal, Sushil K.; Wetherill, G. W.** Rb^{87}-Sr^{87} age of bronzite (G group) chondrites: Jour. Geophys. Research, v. 74, no. 10, p. 2717-2726, illus., tables, 1969.

74-328 **Kautzleben, Heinz; Mundt, Wolfgang; Rother, Gudrun.** Uber ein geomagnetisches Normalfeld der Vertikalkomponente in Mitteleuropa [On a geomagnetic normal field of the vertical component in Central Europe (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 148-160, illus., tables, 1969.

65-378 **Kavanagh, L. D., Jr.; Freeman, J. W., Jr.; Chen, A. J.** Plasma flow in the magnetosphere: Jour. Geophys. Research, v. 73, no. 17, p. 5511-5519, illus., 1968.

Kawada, Kaoru. See *Uyeda, Seiya. 270-232*

Kawano, Yoshinori. See *Matsumoto, Tatsuro. 273-017*

68-379 **Kawashima, Nobuki.** Analysis of fluctuations in the interplanetary magnetic field obtained by IMP 2: Jour. Geophys. Research, v. 74, no. 1, p. 225-230, illus., table, 1969.

64-111 **Kawasumi, Hirosi.** (editor). General report on the Niigata earthquake of 1964: Tokyo, Japan, Tokyo Electrical Engineering College Press, 550 p., illus., tables, 1968.

64-113 **Kawasumi, Hirosi.** Historical earthquakes in the disturbed area and vicinity, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 33-46, illus., 1968.

264-120 **Kawasumi, Hirosi; Shibano, Mutsuro.** Effect of geology on earthquake intensity, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 149-156, illus., 1968.

264-122 **Kawasumi, Hirosi; Sato, Yasuo.** Intensity of Niigata earthquake as determined from questionnaires, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 175-179, illus., table, 1968.

268-219 **Kay, Marshall.** North Atlantic continental drift, *in* Gondwanaland revisited—New evidence for continental drift: Am. Philos. Soc. Proc., v. 112, no. 5, p. 321-324, illus., 1968.

Kay, Marshall. See *Dewey, John. 269-298*

264-115 **Kayano, Ichiro; Hagiwara, Takahiro.** Aftershocks of the Niigata earthquake of June 16, 1964, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 63-86, illus., tables, 1968.

266-128 **Kayano, Ichiro.** Determination of origin times, epicenters and focal depths of aftershocks of the Niigata earthquake of June 16, 1964—A preliminary report of the cooperative study of aftershocks of the Niigata earthquake [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 223-269, illus., tables, 1968.

Kazak, B. N. See *Kovtun, A. A. 265-245*

265-256 **Kazak, B. N.** Flyuksmetr s reguliruyemoy chastotnoy kharakteristikoy [A flux meter with regulatable frequency characteristic]: Geofiz. Apparatura, no. 27, p. 51 58, illus., 1966.

Kazak, B. N. See *Baranskiy, L. N. 265-424*

271-353 **Kazak, B. N.; Raspopov, O. M.** Standardization of the frequency characteristic of the equipment used to record geomagnetic field variations: Geomagnetism an Aeronomy, v. 8, no. 4, p. 613-616, illus., 1968.

271-228 **Kazakhevich, Yu. P.; Kostenko, N. P.** Nekotoryye osobennosti neotektonik Aziatskogo gornogo poyasa i ikh svyaz' s rossypnymi mestorozhdeniyami [Some fea tures of the neotectonics of the Asiatic mountain belt and their relationship to place deposits], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kor (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 40-46, illus 1968.

270-400 **Kazakov, A. T.** Metodika i tekhnika vzryvnykh rabot pri seysmorazvedk [Procedure and technique of shooting in seismic surveying]: Moscow, Izdatel'stvo " Nedra," 328 p., illus., tables, 1968.

275-384 **Kazakov, A. T.** Metodika i tekhnika vzryvnykh rabot pri seysmorazvedk [Method and technique of shooting in seismic surveying]: Moscow, Gosudarst Nauchnotekh. Izdatel'stvo Neftyanoy i Gornotoplivnoy Literatury, 327 p., 1961.

275-029 **Kazakov, G. A.** Issledovaniye prigodnosti glaukonitov dlya opredeleniya a solyutnogo vozrasta osadochnykh porod [Investigations of the suitability of gla conites for the determination of the absolute age of sedimentary rocks], *in* Khimi Zemnoy Kory — Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nau SSSR Inst. Geokhimii i Analit. Khimii, p. 539-551, illus., tables, 1964.

266-042 **Kazakov, G. A.** Research on the possibility of absolute dating of sedimenta rocks using glauconites, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Pr gram for Scientific Translations, p. 577-591, table, 1967; Russian text, Issledovani

prigodnosti glaukonitov dlya opredeleniya absolyutnogo vozrasta osadochnykh porod, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

Kazanskiy, M. M. See *Gorodnitskiy, A. M. 273-200*

Kazanskiy, M. M. See *Gorodnitskiy, A. Am. 273-210*

274-352 **Kazarin, V. A.; Kozin, I. D.; Taylor, D. Kh.** Geofizicheskiye protsessy i variatsii kosmocheskikh luchey vo vremya magnitnoy buri na stantsii Vostok [Geophysical processes and cosmic ray variations at the time of a magnetic storm at the Vostok station]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 63, p. 43-44, table, 1967.

275-032 **Kazaryan, G. A.; Kuyumdzhyan, A. G.; Chibukhchyan, Z. O.** O vozrastnom raschlenenii magmaticheskikh porod Vardenisskogo nagor'ya [On the age subdivision of the magmatic rocks of the Vardenis upland]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 20, no. 4, p. 32-43, tables, 1967.

Kazhdan, D. A. See *Gerver, M. L. 266-196*

266-119 **Kebeasy, Rashad Mohamed.** Propagation of near earthquake waves with special reference to the anisotropy of the Japanese Honshu Island arc: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 19-46, illus., tables, 1967.

Kedrov, A. I. See *Zaporozhets, V. M. 272-482*

Kedrova, T. S. See *Kozlov, Ye. A. 268-557*

271-382 **Keen, M. J.** Possible edge effect to explain magnetic anomalies off the eastern seaboard of the US: Nature, v. 222, no. 5188, p. 72-74, illus., 1969.

274-455 **Keen, M. J.** An introduction to marine geology: London and Toronto, Pergamon Press, 218 p., illus., tables, 1968.

Kefeli, A. S. See *Puzyrev, N. N. 272-501*

Kegeleva, N. A. See *Karatayev, G. I. 266-395*

268-114 **Keightley, W. O.; Frazier, G. A.** Earth dam undergoes earthquakes, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 195-224, illus., tables, 1968.

267-052 **Keil, Klaus.** Mineralogical and chemical relationships among enstatite chondrites: Jour. Geophys. Research, v. 73, no. 22, p. 6945-6976, illus., table, 1968.

269-092 **Keil, Klaus.** Zincian daubreelite from the Kota-Kota and St. Mark's enstatite chondrites: Am. Mineralogist, v. 53, nos. 3-4, p. 491-495, illus., table, 1968.

267-456 **Keller, G. H.; Peter, G.** East-west profile from Kermadec Trench to Valparaiso, Chile: Jour. Geophys. Research, v. 73, no. 22, p. 7154-7157, illus., 1968.

Keller, G. V. See *Wuenschel, P. C. 274-217*

266-208 **Keller, George V.** Discussion on "An inverse slope method of determining absolute resistivity" by P. V. Sankar Narayan and K. R. Ramanujachary (Geophysics, v. 32, no. 6, p. 1036-1040, December 1967): Geophysics, v. 33, no. 5, p. 843-845, illus., table, 1968.

66-210 **Keller, George V.** Electrical prospecting for oil: Colorado School Mines Quart., v. 63, no. 2, 268 p., illus., tables, 1968.

74-170 **Keller, George V.** Electrical resistivity of modern reef sediments from Midway Atoll, Hawaii, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. K1-K15, illus., 1969.

Kellogg, William C. See *Hood, Peter J. 269-254*

275-186 **Kellogg, William C.** Trends in mining geophysics: Mining Eng., v. 21, no. 2, p. 77, 1969.

Kelly, E. J. See *Lacoss, R. T. 271-497*

271-262 **Kemp, W. C.** Evidence for Pleistocene ice lags: Nature, v. 221, no. 5187, p. 1231-1232, tables, 1969.

270-473 **Kempe, Walter F.** Drilling and sampling rock: Log Analyst, v. 8, no. 2, p. 11-15, illus., 1967.

266-015 **Kempton, J. P.; Hackett, J. E.** The Late-Altonian (Wisconsinan) glacial sequence in northern Illinois, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 535-546, illus., 1968.

Kemurjian, A. L. See *Cherkasov, I. I. 268-100*

268-546 **Kendall, G. W.** The Motpena area of the Pirie-Torrens basin—Seismic refraction and reflection survey: South Australia Dept. Mines Mining Rev. 1966, no. 124, p. 85-92, illus., 1968.

274-320 **Kendall, P. C.; Windle, D. W.; Akasofu, S.-I.; Chapman, S.** A model midnigh meridian magnetospheric field: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p 185-194, illus., table, 1969.

Kennel, C. F. See *Fredricks, R. W. 269-396*

267-382 **Kenney, J. F,; Knaflich, H. B.; Liemohn, H. B.** Magnetospheric parameters determined from structured micropulsations: Jour. Geophys. Research, v. 73, no. 21, p 6737-6749, illus., 1968.

Kenny, George S. See *Denison, Rodger E. 269-006*

267-197 **Kent, L. E.; Enslin, J. F.** Ground-water prospecting methods used in th Republic of South Africa: South Africa Dept. Mines Geol. Survey Annals 1965, v. 4 p. 151-156, illus., 1968.

266-241 **Kent, P. E.** Geological problems in North Sea exploration, *in* Geology of she seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver an Boyd, p. 73-86, illus., 1968.

264-421 **Keppner, Gerhard.** Erdmagnetische Untersuchungen an Gasvulkanen de Schwabischen Alb [Geomagnetic investigations on the gas volcanoes of the Swabia Alb]: Stuttgart Tech. Hochschule Geol.-Paläontol. Inst. Arb., new ser., no. 25, p., illus., 1959.

Kern, H. See *Karl, F. 268-585*

268-586 **Kern, H.; Karl, F.** Über Beanspruchung und Verformung von Gesteinen—[P 3, Synkristalline Verformungen an Auerbach-Marmoren bei axial-symmetrisch und echt dreiachsig wirkender Beanspruchung [On stress and deformation of rock [Pt.] 3, Syncrystalline deformations on marbles from Auerbach at axial-symmetr and real triaxial stress (with English abs.)]: Contr. Mineralogy and Petrology, v. 1 no. 3, p. 225-240, illus., table, 1968.

267-061 **Kerridge, J. F.; Chatterji, S.** Magnetite content of a Type I carbonaceous cho drite: Nature, v. 220, no. 5169, p. 775-776, 1968.

265-675 **Ketola, Matti; Puranen, Maunu.** Type curves for the interpretation of Slingra (horizontal loop) anomalies over tabular bodies [with Finnish abs.]: [Finland] Ge Tutkimuslaitos Tutkimusrap., no. 1, 19 p., illus., 1967.

268-178 **Ketola, Matti.** The interpretation of Slingram (horizontal loop) anomalies by small-scale measurements [with Finnish abs.]: [Finland] Geol. Tutkimuslaitos Tutkimusrap., no. 2, 33 p., 48 figs., 1968.

270-430 **Key, Charles R.; Moss, George J., Jr.; MacDonald, Frank H.** Precision bathymetric detector, *in* Marine sciences instrumentation, V. 4—Instrument Soc. America Symposium, 4th Natl., Cocoa Beach, Fla., 1968, Proc.: New York, Plenum Press, p. 78-86, illus., 1968.

266-178 **Key, F. A.** Some observations and analyses of signal generated noise: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 377-392, illus., 1968.

Keylis-Borok, V. I. See *Arnold, E. P. 266-157*

266-159 **Keylis-Borok, V. I.** Seysmologiya i logika [Seismology and logic], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 317-350, illus., 1968.

269-410 **Keymenova, N. G.; Troitskaya, V. A.; Vigneron, J.** Relationship between middle-latitude VLF emissions and magnetic activity: Geomagnetism and Aeronomy, v. 8, no. 3, p. 420-423, illus., 1968.

267-623 **Keys, W. Scott.** Aquifer evaluation with radioisotope well logs, *in* Symposium on ground-water hydrology, San Francisco, Calif., 1967, Proc.: Am. Water Resources Assoc. Proc. Ser., no. 4, p. 319-328, illus., 1967.

274-482 **Keys, W. Scott; Boulogne, A. R.** Well logging with californium-252, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. P1-P25, illus., tables, 1969.

Keyvsar, Z. I. See *Zefirov, N. N. 264-571*

269-312 **Khain, V. E.; Muratov, M. V.** Geosynclinal belts, orogenic belts, folded belts and their relation in time and space, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 3, Orogenic belts: Prague, Academia, p. 9-13, 1968.

273-304 **Khait, B. S.** Izmereniye vremeni dlya opredeleniya uskoreniya sily tyazhesti mayatnikovym metodom [Measurement of time for determining gravity acceleration by the pendulum method], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 168-187, illus., 1968.

266-531 **Khalevin, N. I.; Bun'kov, A. M.; Dolgikh, V. V.** Primeneniye prostranstvennykh seysmicheskikh zondirovaniy dlya izucheniya zemnoy kory na Urale [Use of spatial seismic sounding to study the Earth's crust in the Urals]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 3, p. 90-96, 1968.

267-133 **Khalevin, N. I,; Nezolenova, E. A.; Braslavskiy, B. Ya.** Pervyye rezul'taty seysmogeologicheskikh issledovaniy Instituta geofiziki na Urale [First results of seismogeologic investigations by the Institute of Geophysics on the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 174-182, illus., 1968.

267-203 **Khalevin, N. I.; Druzhinin, V. S.; Dolgikh, V. V.** Elementy stroyeniya Srednego Urala po dannykh kompleksnykh geofizicheskikh issledovaniy [Elements of the structure of the Central Urals according to data of combined geophysical investigations], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 80-87, illus., 1968.

Khalevin, N. I. See *Druzhinin, V. S. 267-594*

Khalevin, N. I. See *Bun'kov, A. M. 267-595*

268-349 **Khalevin, N. I.** O stroyenii zemnoy kory Russkoy platformy, Urala i Zapadno-Sibirskoy nizmennosti [On crustal structure of the Russian platform, Urals, and West Siberian Lowland], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 3-8, illus., 1967.

Khalevin, N. I. See *Nezolenova, E. A. 268-351*

268-352 **Khalevin, N. I.; Nezolenova, E. A.; Gontar', V. T.** K vozmozhnosti izucheniya seysmorazvedkoy narusheniy zemnoy kory na Urala [On the possibility of studying crustal breaks in the Urals by seismic surveying], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 21-26, illus., 1967.

268-353 **Khalevin, N. I.; Nezolenova, E. A.; Drozdova, N. N.** Izucheniye razdela Mokhorovichicha pri diskretno-nepreryvnykh sistemakh nablyudeniya GSZ [Study of the Mohorovicic discontinuity with discrete-continuous systems of deep seismic sounding observations], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 27-30, illus., 1967.

268-567 **Khalevin, N. I.; Aleksashenko, V. N.** Kodirovannaya otmetka momenta vzryva pri seysmicheskikh issledovaniyakh [Coded mark of the moment of a shot in seismic investigations], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 67-72, illus., 1967.

270-383 **Khalevin, N. I.; Nezolenova, E. A.; Lomakin, V. S.** Ob ispol'zovanii poperechnykh voln pri izuchenii zemnoy kory [On the use of transverse waves in studying the Earth's crust]: Akad. Nauk SSSR Doklady, v. 183, no. 2, p. 329-331, illus., 1968.

Khalevin, N. I. See *Druzhinin, V. S. 273-468*

265-051 **Khalilov, M. Kh.** Ob absolyutnom vozraste krustalenochnykh kvartsevykh zhil severo-vostochnoy chasti Vanchskogo khrebta [On the absolute age of the crystal-bearing quartz veins of the northeastern part of the Vanch Range]: Akad. Nauk SSSR Izv. Ser. Geol., no. 7, p. 106-109, illus., tables, 1968.

Khalliyev, S. P. See *Bliskavka, A. G. 275-375*

Khalturin, V. I. See *Nersesov, I. L. 271-095*

Khamrabayev, I. Kh. See *Butovskaya, Ye. M. 269-373*

Khan, M. A. See *Ade-Hall, J. M. 269-434*

Khan, M. A. See *Ade-Hall, J. M. 269-435*

Khan, M. A. See *Ade-Hall, J. M. 269-436*

264-200 **Khan, Mohammad Asadullah.** A re-evaluation of the theory for the hydrostatic figure of the Earth: Jour. Geophys. Research, v. 73, no. 16, p. 5335-5342, illus., tables, 1968.

266-218 **Khanakhbey, Ye. B.** O vliyanii magnitnykh svoystv sfery na nizkochastotnoye pole dipolya v provodyashchey srede [On the effect of the magnetic properties of a sphere on the low-frequency field of a dipole in a conducting medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 68-75, illus., 1968.

Khankin, A. L. See *Kulinkovich, A. Ye. 268-644*

Khanlarova, Sh. G. See *Akhmedov, A. M. 275-444*

Kharaz, I. I. See *Raykher, L. D. 266-525*

Kharaz, I. I. See *Benderskiy, V. Ya. 269-646*

Kharin, Ye. P. See *Van'yan, L. L. 266-239*

272-180 **Kharin, Ye. P.** Vliyaniye provodyashchikh otlozheniy Baykal'skoy vpadiny na variatsii geomagnitnogo polya [The effect of conducting formations of the Baikal basin on variations of the geomagnetic field]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 107-111, illus., table, 1968.

264-497 **Kharitonov, O. M.** O dvukh tipakh kratnosti voln v Sivashskoy vpadine [On two types of multiples in the Sivash depression (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 65-73, illus., 1968.

275-386 **Kharitonov, O. M.** O primeneniye gruppirovaniya dlya podavleniya kratnykh otrazhennykh voln v Sivashskoy vpadine [On the use of grouping to suppress multiple reflections in the Sivash basin (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 12-18, illus., 1969.

Kharitonov, S. Ye. See *Migunov, B. B. 264-586*

Kharitonov, V. D. See *Tyapkin, K. F. 269-274*

269-593 **Kharitonova, R. Sh.** O regional'nykh izmeneniyakh yestestvennoy radioaktivnosti gornykh porod terrigennykh otlozheniy devona severo-vostoka Tatarii i yuga Udmurtii [On the regional variations of natural radioactivity of the rocks of the Devonian clastic formations in northeastern Tatary and southern Udmurtia], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 207-214, illus., tables, 1966.

Kharus, R. L. See *Sen'ko-Bulatnyy, I. N. 269-711*

266-374 **Khasanov, A. S.; Grebenshchikova, T. B.; Kurbanov, S. Ya.** Nekotoryye geotermicheskiye pokazateli Bukharo-Karshinskogo artezianskogo basseyna [Some geothermal indexes of the Bukhara-Karshi artesian basin]: Uzbek. Geol. Zhur., no. 5, p. 59-63, illus., table, 1966.

274-028 **Khasanov, R. Kh.** Ob absolyutnom vozraste Lyangarskogo intruziva [On the absolute age of the Lyangar intrusive]: Akad. Nauk Tadzhik. SSR Doklady, v. 11, no. 9, p. 54-55, table, 1968.

274-084 **Khattri, K. N.** Determination of earthquake fault plane, fault area, and rupture velocity from the spectra of long period P waves and the amplitude of SH waves: Seismol. Soc. America Bull., v. 59, no. 2, p. 615-630, illus., 1969.

274-087 **Khattri, K. N.** Focal mechanism of the Brazil deep focus earthquake of November 3, 1965, from the amplitude spectra of isolated P waves: Seismol. Soc. America Bull., v. 59, no. 2, p. 691-704, illus., table, 1969.

Khaturin, V. I. See *Antonova, L. V. 267-130*

Khaydutov, I. See *Bonchev, E. 272-116*

Khazankina, S. P. See *Kulinkovich, A. Ye. 268-644*

269-267 **Khesin, B. E.** Geofizicheskaya kharakteristika tektono-magmaticheskikh zon Azerbaydzhana [Geophysical characteristics of the tectonomagmatic zones of Azerbaijan (with English summ.)]: Geotektonika, no. 6, p. 61-69, illus., table, 1968.

266-333 **Kheysin, D. Ye.** Dinamika ledyanogo pokrova [Ice-sheet dynamics]: Leningrad, Gidrometeorologicheskoye Izdatel'stvo, 215 p., illus., table, 1967.

266-392 **Khitarov, N. I.** Properties of the deep-seated zone of the Earth's crust according to certain experimental data, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 35-40, illus., 1967; Russian text, Osobennosti glubokikh zon zemnoy kory po nekotorym eksperimental'nym, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

275-265 **Khitarov, N. I.** Osobennosti glubokikh zon zemnoy kory po nekotorym eksperimental'nym dannym [Features of the deep zones of the Earth's crust according to some experimental data], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 36-41, illus., 1964.

Khivalovskiy, A. G. See *Fursov, V. A. 269-203*

270-195 **Khizanashvili, G. G.** Formation of submarine valleys in the light of the dynamics of the Earth's axis, *in* The Earth and the Universe: Springfield, Va., Federal Clearinghouse Sci. and Tech. Inf., p. 244-257, illus., tables, 1968; translated from Russian, *in* Zemlya vo vselennoy: Moscow, Izdatel'stvo "MYSL," 1964.

265-276 **Khizhnyakov, A. V.** O pogrebennom rel'yefe fundamenta Volyno-Podol'skiy okrainy Russkoy platformy v svyazi s perspektivami neftegazonosnosti paleozoya [On the buried relief of the basement in the Volyn-Podol'skiy margin of the Russian platform in connection with the prospects for oil and gas in the Paleozoic]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 9, p. 10-16, illus., 1964.

265-277 **Khizhnyakov, A. V.; Vitrik, S. P.** O drevnykh nemykh tolshchakh i glubine zaleganiya kristallicheskogo fundamenta v L'vovskom paleozoiskom progibe [On the ancient barren series and depth of the crystalline basement in the Lvov Paleozoic depression]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 9, p. 26-32, illus., 1964.

Khlopov, B. V. See *Lebedinskiy, A. I. 268-098*

Khmelevskoy, I. F. See *Chizov, O. P. 264-241*

268-257 **Khmelevskoy, I. F.** Prisposobleniye dlya zabivaniya termozonda v led [Device for driving a thermoprobe into ice], *in* Materialy glyatsiologicheskikh issledovaniy, Khronika Obsuzhdeniya, no. 14: Moscow, Akad. Nauk SSSR Inst. Geografii, p. 295-296, illus., 1968.

Khodak, Yu. A. See *Tomson, I. N. 269-165*

269-170 **Khodak, Yu. A.** Global'naya tektonika Luny (Global tectonics of the Moon (with English abs.)]: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Řada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 171-181, illus., 1968.

272-089 **Khodak, Yu. A.** Struktura i stratifitsirovannyye sootnosheniya obrazovaniy Marsa [Structure and stratified relationships of the formation of Mars]: Akad. Nauk SSSR Izv. Ser. Geol., no. 1, p. 31-44, illus., 1969.

269-660 **Khodzhayev, A. R.; Azimov, P. K.** Novyye dannyye o tektonike Ferganskoy mezhgornoy vpadiny [New data on the tectonics of the Fergana intermontane basin]: Uzbek. Geol. Zhur., no. 4, p. 3-7, illus., 1968.

269-251 **Khodzhayev, T. K.** O vyyasnenii geologo-gidrogeologicheskikh usloviy Osh-Aravanskoy vpadiny pri pomoshchi VEZ [On the investigation of the geologic-hydrologic conditions in the Osh-Aravan basin using vertical resistivity sounding]: Uzbek. Geol. Zhur., no. 4, p. 68-69, 1968.

273-220 **Kholin, A. I.; Bykov, R. I.; Shraybman, V. I.; Yudin, G. T.; Sudarikov, Yu. A.; Kalinina, R. A.** Ispol'zovaniye sredstv kibernetiki dlya analiza geologo-geofizicheskikh faktorov, opredelyayushchikh neftegazonosnost' antiklinal'nykh podnyatiy [Use of cybernetic means for analyzing the geologic and geophysical factors determining the oil- and gas-bearing capability of anticlinal uplifts], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 13, Matematicheskiye metody v geologii: Moscow, Izdatel'stvo "Nauka," p. 69-75, illus., table, 1968.

Kholin, V. N. See *Migunov, B. B. 264-586*

275-449 **Kholin, V. N.** O tochnosti opredeleniya soderzhaniya zheleza, svyazannogo s magnetitom, v zheleznykh rudakh Krivbassa po metodu karotazha magnitnoy vospriimchivosti [On the accuracy of the determination of the iron content related to magnetite in the iron ores of the Krivoy Rog basin by the method of magnetic susceptibility logging]: Razved. i Okhrana Nedr, no. 3, p. 36-40, illus., tables, 1969.

273-199 **Kholmyanskiy, M. A.** Analiz geoelektricheskogo razreza i ispol'zovaniye elektrometricheskikh issledovaniy v Igarsko-Noril'skom rayone [Analysis of the geoelectric section and use of electrometric investigations in the Igarka-Norilsk region], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 79-93, illus., tables, 1968.

273-203 **Kholmyanskiy, M. A.; Letov, B. I.** Geofizicheskiye dannyye o stratigrafii verkhnego dokembriya Igarskogo rayona [Geophysical data on the stratigraphy of the Upper Precambrian of the Igarka region], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 252-256, illus., 1968.

Kholodova, L. D. See *Vasilenko, V. B. 273-314*

274-215 **Khomenko, V. I.** Tektonīka zakarpats'koho prohynu za danymy heofīzychnykh metodīv doslīdzhen' [Tectonics of the Transcarpathian depression according to data of geophysical methods of investigation (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 2, p. 120-124, illus., 1969.

267-180 **Khomenyuk, Yu. V.** Pereklyuchatel' napravleniya postoyannogo toka [A changeover switch for reversing the direction of d.c. current]: Geofiz. Apparatura, no. 34, p. 164-167, illus., 1967.

Khorenyan, D. V. See *Atsagortsyan, Z. A. 268-602*

Khoroshilov, L. V. See *Tomson, I. N. 269-165*

264-393 **Khramov, A. N.** Importance of palaeomagnetic data for Devonian stratigraphy and palaeogeography in the USSR, *in* Internat. Symposium on the Devonian System, Calgary, Alberta, 1967, V. 2 (D. H. Oswald, editor): Calgary, Alberta, Alberta Soc. Petroleum Geologists, p. 1363-1370, illus., table, 1967.

Khramov, P. M. See *Komarov, Yu. V. 271-221*

Khramoy, A. I. See *Kolesnik, A. P. 269-277*

Khristianova, L. A. See *Baranov, V. I. 275-355*

267-332 **Khrychev, B. A.; Lysyakov, L. M.; Al'ter, S. M.; Ivanov, A. P.** Stroyeniye zemnoy kory po profilyu Temirtau-Kuyybyshev [Crustal structure along the Temirtau-Kuybyshev profile], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 88-93, illus., table, 1968.

Khudobina, L. N. See *Brodov, L. U. 268-547*

Khudobina, L. N. See *Puzyrev, N. N. 269-634*

Khutsishvili, L. A. See *Ab, E. A. 270-346*

Khutsishvili, L. A. See *Ab, E. A. 270-526*

Khutsishvili, L. A. See *Ab, E. A. 272-553*

Khvedelidze, N. S. See *Nodia, M. Z. 265-427*

Khvedelidze, N. S. See *Nodia, M. Z. 267-428*

Khvilevitskiy, M. O. See *Znamenskiy, V. V. 265-650*

Khvilevitskiy, M. O. See *Znamenskiy, V. V. 271-524*

Khvitia, G. P. See *Bukhnikashvili, A. V. 266-233*

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Kienzle, Jack. See *Baag, Czang-go. 267-463*

Kiesl, W. See *Schaudy, R. 271-038*

266-372 **Kikínadze, D. A.; Chikhradze, Sh. G.** Marcwlowani stružturis zobierthi danaleži žanis sithbur koephicientebze šinotiwis gawlenis sesaheb [On the effect of moisture content on the thermal coefficients of some sedimentary rocks with granular structure (in Georgic with Russian summ.)]: Akad. Nauk Gruzin. SSR Soobshch., v. 51, no. 1, p. 59-62, illus., table, 1968.

Kikuchi, Shigetomo. See *Kubotera, Akira. 265-151*

271-560 **Kikuchi, Shigetomo; Sako, Mikio.** Volcanic micro-earthquakes and microtremors [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 2, p. 84-94, illus., tables, 1968.

268-386 **Kilczer, Gyula.** Entwicklung des erdmagnetischen Potentials durch eine Multipolreihe [Development of the geomagnetic potential through a multipole series (with English abs.)]: Gerlands Beitr. Geophysik, v. 76, no. 6, p. 449-452, 1967.

267-398 **Kilfoyle, B. P.; Jacka, F.** Geomagnetic L coordinates: Nature, v. 220, no. 5169, p. 773-775, illus., 1968.

266-201 **Kilinchuk, L. M.; Yanovskaya, T. B.** Ob intensivnosti osnovnykh seysmicheskikh voln. 1. Volny, rasprostranyayushchiyesya v obolochke Zemli [On the intensity of the main seismic waves—(Pt.) 1, Waves propagating in the Earth's mantle], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 226-251, illus., tables, 1968.

Killeen, P. G. See *Sass, J. H. 272-227*

274-429 **Kim, C. S.; Koo, J. H.; Yang, S. J.; Suh, J. H.** Report on seismic prospecting in the Pohang area [in Korean with English abs.]: Korea Geol. Survey Rept., Geophys. Explor., v. 2, no. 1, p. 211-217, illus., 1968.

Kim, Chang Ki. See *Lee, Dang Hoon. 274-183*

Kim, Changki. See *Kim, Chulmin. 274-185*

267-262 **Kim, Chong Su; Koo, Ja Hak; Kim, Hun Joon; Lee, Hun Ki; Chang, Chung Chin; Yew, Kong Yul; Kim, Joo Tae; Cho, Kyu Jang; Kim, Dae Kyu.** Summarized report of geophysical prospecting on the Pohang-Hunghae district [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 5-27, illus., table, 1967.

267-462 **Kim, Chong Su; Cho, Kyu Jang; Ahn, Un Shik; Yang, Sung Jin; Suh, Jung Hee.** Geophysical prospecting on the Pohang offshore area [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 61-69, illus., 1967.

Kim, Chong Su. See *Lee, Joung Hwan. 274-457*

Kim, Chul Min. See *Lee, Dang Hoon. 274-183*

274-185 **Kim, Chulmin; Kim, Changki; Seward, F. A., Jr.; Jeong, Kichang.** Fifth geophysical investigation in the Kuryong copper mine area [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 169-174, illus., 1968.

Kim, Dae Kyu. See *Kim, Chong Su. 267-262*

Kim, Hun Joon. See *Kim, Chong Su. 267-262*

Kim, J. T. See *Lee, C. H. 274-268*

Kim, J. T. See *Koo, J. H. 274-378*

Kim, Joo Tae. See *Kim, Chong Su. 267-262*

267-464 **Kim, Joo Tae.** Report of detailed magnetic prospecting on the Keumgock iron mine [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 107-115, illus., tables, 1967.

Kim, K. S. See *Lee, C. H. 274-268*

Kim, S. M. See *Noakes, John E. 265-017*

269-629 **Kimura, Shigemasa.** On the explosion of propane-oxygen mixture as the sound source of sonic exploration for deep geologic structure [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 4, p. 211-223, illus., tables, 1968.

Kind, N. V. See *Cherdyntsev, V. V. 265-023*

Kind, N. V. See *Cherdyntsev, V. V. 265-024*

Kind, N. V. See *Cherdyntsev, V. V. 267-036*

272-038 **Kind, N. V.; Zavel'skiy, F. S.; Kryukov, V. D.; Sulerzhitskiy, L. D.; Troitskiy, S. L.; Forova, V. S.** Novyye materialy po absolyutnoy khronologii verkhnepleystotsenovykh oledeniy Sibiri (po dannym C-14) [New data on the absolute chronology of the late Pleistocene glaciations of Siberia (according to C-14 data)]: Akad. Nauk SSSR Doklady, v. 184, no. 6, p. 1387-1390, illus., 1969.

271-049 **King, Chi-Yu.** Seismic efficiency: Jour. Geophys. Research, v. 74, no. 6, p. 1702-1703, 1969.

272-097 **King, Chi-Yu; Knopoff, Leon.** A magnitude-energy relation for large earthquakes: Seismol. Soc. America Bull., v. 59, no. 1, p. 269-273, illus., 1969.

King, E. A. See *Lafleur, L. D. 268-031*

270-023 **King, E. A., Jr.; Schonfeld, E.; Richardson, K. A.; Eldridge, J. S.** Meteorite fall at Pueblito de Allende, Chihuahua, Mexico—Preliminary investigation: Science, v. 163, no. 3870, p. 928-929, illus., table, 1969.

269-108 **King, Elbert A., Jr.; Bouška, Vladimír.** Electron microprobe analysis and petrology of a two-colored moldavite from Lípí-Slávče (Bohemia), Czechoslovakia, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 37-41, tables, 1968.

King, I. P. See *Zienkiewicz, O. C. 266-545*

266-285 **King, Philip B.** Regional relationships of an ancient massif in northwestern Sonora [Discussion of papers by R. G. Gastil and R. H. Merriam, 1968], *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 288-289, 1968.

265-315 **King-Hele, D. G.; Cook, G. E.; Scott, Diana W.** New evaluation of the odd zonal harmonics in the geopotential: Nature, v. 219, no. 5159, p. 1143-1144, illus., 1968.

273-224 **King-Hele, D. G.; Cook, G. E.; Scott, Diana W.** Evaluation of odd zonal harmonics in the geopotential, of degree less than 33, from the analysis of 22 satellite orbits: Planetary and Space Sci., v. 17, no. 4, p. 629-664, illus., tables, 1969.

Kinoshita, H. See *Ozima, M. 264-404*

Kinoshita, H. See *Ozima, M. 264-406*

264-403 **Kinoshita, Hajimu.** Studies on piezo-magnetization—[Pt.] 2, Change in the initial susceptibility of fine-grain assemblage of ferromagnetics due to uniaxial compression: Jour. Geomagnetism and Geoelectricity, v. 20, no. 2, p. 75-83, illus., 1968.

Kinoshita, Hajimu. See *Ohnaka, Mitiyasu. 264-405*

Kinoshita, Hajimu. See *Ohnaka, Mitiyasu. 266-125*

268-416 **Kinoshita, Hajimu.** Studies on piezo-magnetization—[Pt.] 3, PRM and relating phenomena: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 155-167, illus., table, 1968.

275-333 **Kinoshita, Hajimu.** Studies on piezo-magnetization—[Pt.] 4, Interpretation of PRM production for single domain grains: Jour. Geomagnetism and Geoelectricity, v. 21, no. 1, p. 409-426, illus., 1969.

266-124 **Kinoshita, Hajimu; Ohmaka, Mitiyasu.** Magnetism of rocks from a lava dome, Mt. Minakami—Application to earthquake prediction, [Pt.] 1 [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 1, p. 1-11, illus., table, 1968.

265-240 **Király, Ernő; Szabadváry, Lázló; Verő, József.** GE-40 típusjelü geoelektromos melyszondázó berendezés [Ge-40 type geoelectric depth sounding instrument (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 2, p. 54-59, illus., 1968.

Kiraly, Erno. See *Erkel, Andras. 266-216*

Kirby, John R. See *Zietz, Isidore. 265-456*

273-472 **Kirda, N. P.** Perspektivy neftenosnosti severnoy chasti Turgayskogo progiba [Prospects for oil in the northern part of the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 13-28, illus., tables, 1964.

Kireyev, A. D. See *Arnautov, N. V. 272-069*

270-514 **Kirichek, M. A.; Korkh, Z. A.** O nekotorykh rezul'tatakh analiza geoelektricheskogo razreza v rayone Gazlinskogo gazovogo mestorozhdeniya [On some results of analysis of the geoelectrical section in the region of the Gazly gas field]: Razved. Geofizika, no. 29, p. 66-75, illus., table, 1968.

266-325 **Kirikov, D. A.** Glavneyshiye sistemy glubinnykh razlomov podvizhnykh oblastey Vostoka SSSR i ikh rol' kak magmokontroliruyushchikh struktur [The main systems of abyssal faults of the mobile regions of the East of the U.S.S.R. and their role as magma-controlling structures]: Vses. Nauchno-Issled. Geol. Inst. Trudy, v. 135, p. 5-42, illus., 1967.

268-185 **Kirillov, V. A.; Kuvayev, O. M.; Syuzyumov, L. M.; Yakupov, V. S.** O vozmozhnostyakh opredeleniya moshchnosti rykhlykh nanosov metodom VEZ v usloviyakh mnogoletney merzloty [On the possibilities of determining the thickness of unconsolidated sediments by vertical resistivity sounding in permafrost conditions]: Prikladnaya Geofizika, no. 53, p. 99-107, illus., table, 1968.

274-023 **Kirk, H. J. C.** Absolute age determinations, App. 1 *in* The igneous rocks of Sarawak and Sabah: Malaysia Geol. Survey Borneo Region Bull. 5, p. 120, table, 1968.

Kirk, J. Norman. See *Dellwig, Louis Field. 270-114*

Kirklin, Richard L. See *Shopland, Robert C. 274-404*

Kirnos, D. P. See *Borisevich, Ye. S. 270-083*

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Kirova, O. A. See *Florenskiy, K. P. 267-069*

270-530 **Kirpishchikov, S. P.; Rasputin, V. A.** Peredvizhnoy svintsovyy ekran dlya stsintillyatsionnykh karotazhnykh stantsiy [Adjustable lead shield for scintillation logging stations]: Geofiz. Apparatura, no. 36, p. 154-156, illus., 1968.

Kirsanov, I. T. See *Gorshkov, G. S. 271-552*

Kirsten, G. See *Frolich, F. 264-329*

Kirsten, Günter. See *Frolich, Friedrich. 274-363*

265-374 **Kirsten, T.; Gentner, W.; Müller, O.** Isotopenanalyse der Edelgase in einem Tellurerz von Boliden (Schweden) [Isotopic analysis of the noble gases in a tellurium ore from Boliden (Sweden) (with English abs.)]: Zeitschr. Naturforschung, v. 22a, no. 11, p. 1783-1792, illus., table, 1967.

269-050 **Kirsten, T.; Müller, O.** Argon and potassium in mineral fractions of three ultramafic rocks from the Baltic Shield, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 483-498, illus., tables, 1967.

269-652 **Kiryukhin, L. G.** Struktura platformennogo chekhla i perspektivy neftegazonosnosti Severnogo Priaral'ya [Structure of the platform cover and oil and gas prospects of the region around the northern Aral Sea]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 3-8, illus., 1968.

264-488 **Kiselev, V. S.** Issledovaniye tochnosti opredeleniya parametrov razreza pri optimal'noy interpretatsii odinochnogo godografa [Investigation of the accuracy of determination of the parameters of a section by optimal interpretation of a single traveltime curve]: Prikladnaya Geofizika, no. 50, p. 66-76, illus., 1967.

264-515 **Kiselev, V. S.** Ob opredelenii effektivnoy skorosti po odinochnomu i dvum vstrechnym godografam [On the determination of effective velocity from one single or two opposite traveltime curves]: Prikladnaya Geofizika, no. 51, p. 53-60, illus., 1968.

266-515 **Kiselev, V. S.** O statisticheskikh kharakteristikakh iskazheniy vremen prikhoda otrazhennykh voln [On the statistical characteristicsof distortions of reflected wave traveltimes]: Razved. Geofizika, no. 25, p. 3-7, illus., 1968.

Kiselev, Yu. G. See *Demenitskaya, R. M. 265-360*

Kiselev, Yu. G. See *Demenitskaya, R. M. 273-476*

Kishii, Toshiro. See *Yasui, Masashi. 268-292*

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Kislovskaya, V. V. See *Balakina, L. M. 271-091*

Kisslinger, Carl. See *Bahjat, Dhari S. 274-141*

271-024 **Kistler, Ronald W.** Potassium-argon ages of volcanic rocks in Nye and Esmeralda Counties, Nevada, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 251-262, illus., tables, 1968.

268-381 **Kitamura, T.; Jacobs, J. A.** Ray paths of Pc 1 waves in the magnetosphere: Planetary and Space Sci., v. 16, no. 7, p. 863-879, illus., 1968.

265-685 **Kitsenko, Yu. A.; Konoplev, Yu. V.** Vnedreniye skvazhinnogo impul'snogo generatora neytronov IGN-1 [Introduction of the IGN-1 borehole neutron pulse generator]: Geofiz. Apparatura, no. 27, p. 141-145, illus., table, 1966.

Kitsenko, Yu. A. See *Bespalov, D. F. 272-560*

265-636 **Kitsunezaki, Choro.** Calibration of higher frequency characteristics of geophone: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 181-199, illus., 1967.

269-697 **Kitsunezaki, Choro.** Rigidity logging utilizing tube wave [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 4, p. 199-210, illus., 1968.

264-245 **Kivioja, L.** Significance of open-ocean gravity base stations and calibration lines, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 75-76, 1967.

273-293 **Kivioja, Lassi.** Effect of topographic masses and their isostatic compensation on the mean free air gravity anomalies of 5° $ 5° surface elements: Acad. Sci. Fennicae Annales, ser. A-3, no. 77, 14 p., illus., table, 1964.

268-562 **Kivshik, N. K.; Merkulov, V. I.** Obzor i nekotoryye osnovnyye itogi seysmorazvedochnykh rabot v Krymu [Review and some fundamental results of seismic survey operations in Crimea]: Neftegazovaya Geologiya i Geofizika, no. 10, p. 6-10, illus., 1968.

Kivshik, N. K. See *Merkulov, V. I. 270-534*

Kiyohara, Kiyoto. See *Horikawa, Yoshio. 265-598*

275-215 **Kizaki, K.** Ice-fabric study of the Mawson region, East Antarctica [with French and German abs.]: Jour. Glaciology, v. 8, no. 53, p. 253-274, illus., tables, 1969.

268-595 **Klassen-Neklyudova, M. V.; Urusovskaya, A. A.** Nablyudeniye dislokatsiy v kristallakh metodom izbiratel'nogo travleniya [Observation of dislocations in crystals by the method of selective etching], *in* Simposium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 100-107, illus., 1968.

Kleber, R. See *Heylen, J. 274-011*

Kleimenova, Natalia. See *Tallineau, Yves. 274-323*

Kleinkopf, Dean. See *Mudge, Melville R. 267-249*

275-120 **Klement, William, Jr.** Representation for compressional velocity data near the lambda transition in limestones and marbles: Jour. Geophys. Research, v. 74, no. 15, p. 3940-3941, illus., 1969.

Klenchin, N. N. See *Anan'yeva, Ye. M. 267-202*

Klepczynski, W. J. See *Suncombe, R. L. 267-080*

Klepper, M. R. See *Robinson, G. D. 271-183*

Klepper, M. R. See *Doe, B. R. 275-271*

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Kleymenova, N. G. See *Troitskaya, V. A. 274-338*

274-347 **Kleymenova, N. G.; Tsirs, G. P.** Sopostavleniye nablyudeniy ul'tranizkochastotnykh izlucheniy v Sogre i Loparskoy [Comparison of observations of ultra low frequency emissions at Sogra and Loparskaya]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 112-115, illus., 1969.

264-407 **Kleyn, L. S.** Arkheologiya i magnetizm [Archeology and magnetism]: Priroda, no. 4, p. 65-75, and no. 5, p. 49-55, illus., 1968.

Klichnikov, V. A. See *Brodovoy, V. V. 268-195*

Klichnikov, V. A. See *Brodovoy, V. V. 269-279*

Klikh, Yu. A. See *Divari, N. B. 269-110*

Klikshteyn, B. G. See *Vlasov, V. P. 275-349*

267-144 **Klíma, Karel; Kulhánek, Ota.** Quantitative correlation between preferred orientation of grains and elastic anisotropy of marble: IEEE Trans. Geosci. Electronics, v. GE-6, no. 3, p. 139-143, illus., table, 1968.

272-154 **Klíma, Karel; Babuška, Vladislav.** A comparison of measured and calculated elastic anisotropies of marble: Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. 4, p. 377-384, illus., table, 1968.

Klima, Karel. See *Pros, Zdenek. 274-158*

Klimenko, V. G. See *Tokhtuyev, G. V. 269-672*

Klingebiel, A. See *Ballan, Y. 271-548*

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273-473 **Klubov, A. A.** Perspektivy neftegazonosnosti Turgayskogo progiba [Prospects for oil and gas in the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 28-35, 1964.

268-443 **Klushin, I. G.** Statisticheskoye issledovaniye glubiny rasprostraneniya neodnorodno namagnichennykh gornykh porod [Statistical investigation of the depth of distribution of inhomogeneously magnetized rocks]: Prikladnaya Geofizika, no. 52, p. 128-133, illus., 1968.

273-271 **Klushin, I. G.; Nalivkin, V. D.; Shablinskaya, N. V.** O vozmozhnykh glubinakh korney platformennykh struktur [On the possible depths of the roots of platform structures]: Geotektonika, no. 1, p. 26-38, illus., tables, 1968.

Klushin, I. G. See *Lebedev, T. S. 275-194*

Klyarovskiy, V. M. See *Nikolayeva, I. V. 274-027*

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Knebel, Harley J. See *Dietz, Robert S. 273-494*

Knetsch, G. See *Shata, A. 267-026*

269-175 **Knetsch, Georg.** Bemerkungen zur Entstehung des Lineament-Gitters auf dem Mond [Remarks on the origin of the lineament grid on the Moon (with English abs.)]: Ostrava Vysoké Školy Báňske, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 95-101, illus., 1968.

265-298 **Knetsch, K.** Changing tectonic roles of the Upper Rhine lineament in the course of geological times and events, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 13-15, illus., 1967.

Kneuper, G. See *Colombo, U. 266-410*

Knež, Jaroslav. See *Gruntorad, Jan. 266-215*

Knight, Curtis A. See *Toksoz, M. Nafi. 275-258*

271-202 **Knipper, A. L.** Nekotoryye voprosy tektonicheskogo polozheniya i stanovleniya al'pinotipnykh peridotitov v verkhney chasti zemnoy kory [Some problems of the tectonic position and formation of alpinotype peridotites in the upper part of the Earth's crust (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 21-25, 1968.

Knizhnik, Ye. I. See *Brodovoy, V. V. 269-279*

266-423 **Knödel, K.** A comprehensive investigation into the central European conductivity anomaly: Physics Earth and Planetary Interiors, v. 1, no. 5, p. 309-316, illus., 1968.

266-258 **Knopoff, Leon.** Pan-American Symposium on the Upper Mantle: Am. Geophys. Union Trans., v. 49, no. 3, p. 555-556, 1968.

268-308 **Knopoff, Leon; Drake, Charles L.; Hart, Pembroke J.** (editors). The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), 522 p., illus., tables, 1968.

271-115 **Knopoff, Leon.** Phase and group slowness in inhomogeneous media: Jour. Geophys. Research, v. 74, no. 6, p. 1701, 1969.

Knopoff, Leon. See *Shapiro, J. N. 271-305*

271-306 **Knopoff, Leon; Shapiro, J. N.** Comments on the interrelationships between Gruneisen's parameter and shock and isothermal equations of state: Jour. Geophys. Research, v. 74, no. 6, p. 1439-1450, illus., tables, 1969.

271-311 **Knopoff, Leon.** The upper mantle of the Earth: Science, v. 163, no. 3873, p. 1277-1287, illus., 1969.

Knopoff, Leon. See *King, Chi-Yu. 272-097*

Knorre, K. G. See *Tougarinov, A. I. 273-016*

270-338 **Knothe, Christian; Wetzel, Erika.** Beitrag zu mikroseismischen Untersuchungen in der Deutschen Demokratischen Republik [Contribution to microseismic investigations in the German Democratic Republic]: Freiberger Forschungshefte, C 239, p. 49-75, illus., 1968.

270-378 **Knothe, Christian; Walther, Karl-Friedrich.** Vorbereitung und Durchfuhrung einer seismischen Tiefensondierung im Grenzgebiet DDR-CSSR [Preparation and execution of seismic deep sounding in the East Germany-Czechoslovakia border region]: Freiberger Forschungshefte, C 239, p. 5-47, illus., tables, 1968.

266-444 **Knowles, Raymond R.; Opdyke, Neil D.** Paleomagnetic results from the Mauch Chunk Formation—A test of the origin of curvature in the folded Appalachians of Pennsylvania: Jour. Geophys. Research, v. 73, no. 20, p. 6515-6526, illus., tables, 1968.

Knowles, S. H. See *Shapiro, A. 268-096*

270-499 **Knutson, G. C.** Correlation and analysis of well-bore information by digital computer. *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. [N]1-[N]10, illus., 1968.

Knyazev, V. P. See *Alekseyev, A. M. 270-143*

Knyazev, V. P. See *Yegorov, Yu. M. 270-144*

Ko, H. Y. See *Choate, R. 268-079*

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Kobayashi, Heihachiro. See *Nagumo, Shozaburo. 271-077*

264-123 **Kobayashi, Hiroyoshi.** General reports on damage to buildings in diastered area, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 183-211, illus., 1968.

Kobayashi, K. See *Ozima, M. 264-404*

Kobayashi, K. See *Ozima, M. 264-406*

Kobayashi, Kazuo. See *Sato, Takahiro. 264-546*

266-460 **Kobayashi, Kazuo; Fuller, M.** Stable remanence and memory of multi-domain materials with special reference to magnetite: Philos. Mag., v. 18, no. 153, p. 601-624, illus., tables, 1968.

269-424 **Kobayashi, Kazuo.** Paleomagnetic determination of the intensity of the geomagnetic field in the Precambrian period: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 387-395, illus., tables, 1968.

275-417 **Kobayashi, Kazuo; Toda, Miyoshi.** Wakimoto offshore structure discovered by submarine topographic survey in the Japan Sea, *in* Case histories of oil and gas fields in Asia and the Far East, 2d Ser.—Symposium on Development of petroleum resources of Asia and the Far East, 3d, Tokyo, 1965: U. N. ECAFE Mineral Resources Devel. Ser., no. 29, p. 81-85, illus., 1967.

Kobayashi, Ryoji. See *Horibe, Tomio. 265-669*

Kobayashi, Yoji. See *Kasahara, Junzo. 272-161*

272-125 **Kobayashi, Yoshimasa.** Mechanism of earthquake damage to embankments and slopes [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 3, p. 178-189, illus., tables, 1968.

265-154 **Kobori, Takuji; Minai, Ryoichiro.** Response spectra of quasi-stationary random excitations: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 17, pt. 3, p. 45-94, table, 1968.

274-129 **Kobori, Takuji; Minai, Ryoichiro.** One-dimensional wave-transfer functions of the linear visco-elastic multi-layered half-space: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 4, p. 27-61, illus., 1969.

271-172 **Koch, K. R.** Alternate representation of the Earth's gravitational field for satellite geodesy [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 318-325, 1968.

275-195 **Koch, Karl-Rudolf.** Solution of the geodetic boundary value problem for a reference ellipsoid: Jour. Geophys. Research, v. 74, no. 15, p. 3796-3803, 1969.

Kocharyan, G. B. See *Atsagortsyan, Z. A. 268-602*

Kochegura, V. V. See *Belokon', V. I. 273-386*

264-524 **Kochnev, V. A.** Vvod popravok za kriviznu otrazhayushchey poverkhnosti v znacheniya effektivnykh skorostey, vychislennykh sposobom raznostnykh godografov [Introduction of corrections for curvature of a reflecting surface to the value of effective velocities calculated by the method of differential traveltime curves]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 82-88, illus., 1964.

Kockel, F. See *Harre, W. 273-038*

271-127 **Koefoed, O.** The application of the kernel function in interpreting geoelectrical resistivity measurements—Geopublication Associates Geoexploration Monograph, Ser. 1, No. 2: Berlin, Gebruder Borntraeger, 111 p., illus., 1968.

272-146 **Koenig, M.** Digitalisierung modellseismischer Signale [Digitization of model-seismic signals (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 1, p. 9-15, illus., 1969.

Kogan, A. B. See *Savinskiy, K. A. 275-176*

275-393 **Kogan, A. L.** Rel'yef lozha lednika i nekotoraya geologicheskaya kharakteristika podstilayushchikh porod po marshrutu Molodezhnaya-polyus otnositel'noy nedostupnosti [Relief of the floor of the glacier and some geologic description of the underlying rocks along the Molodezhnaya-Pole of Inaccessibility traverse]: Sovetskaya Antarktich Eksped. Inf. Byull., no. 70, p. 7-13, illus., table, 1968.

271-526 **Kogan, L. I.; Nikolayeva, Ye. Ya.** Nekotoryye kinematicheskiye i dinamicheskiye osobennosti mnogokratnykh voln na more [Some kinematic and dynamic features of multiply reflected waves at sea]: Razved. Geofizika, no. 29, p. 3-16, illus., 1968.

Kogan, M. G. See *Boyarskiy, E. A. 267-265*

271-292 **Kogan, M. G.; Kuzivanov, V. A.** Ispol'zovaniye radionavigatsionnoy sistemy pri opredelenii popravki Etvesha [Use of a radionavigation system in determining the Eötvös correction]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 94-96, illus., tables, 1968.

Kogan, R. M. See *Balyasnyy, N. D. 270-345*

265-661 **Kogan, S. D.** Rezul'taty seysmicheskikh issledovaniy Antarktiki [Results of seismic investigations in the Antarctic], *in* Osnovnyy itogi izucheniya Antarktiki za 10 let—Vses. Soveshchaniye po Izucheniyu Antarktiki, Moscow, 1966, Doklady: Moscow, Izdatel'stvo "Nauka," p. 195-200, illus., tables, 1967.

269-622 **Kohli, G.; Rao, V. Raghavendra.** Status of offshore exploration in India, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 555-560, illus., 1967.

Kohnen, H. See *Thyssen, F. 266-332*

270-374 **Köhsling, J.** Dynamische Untersuchungen von Spannungen in Salzfesten [Dynamic investigations of stresses in solid salt]: Freiberger Forschungshefte, C 225, p. 133-142, illus., 1967.

Koithara, J. See *Itenberg, S. S. 274-472*

Koizimi, M. See *Kume, S. 273-317*

Koizumi, Kinichiro. See *Tomoda, Yoshibumi. 264-428*

Koizumi, M. See *Shimada, M. 269-433*

268-184 **Kokotushkin, G. A.; Dmitriyev, V. I.** Magnitotelluricheskoye pole v sloye so stupenchatym izmeneniyem tolshchiny sloya [Magnetotelluric field in a layer with stepwise change in layer thickness]: Prikladnaya Geofizika, no. 52, p. 104-110, illus., 1968.

Kokubun, S. See *Hayashi, K. 270-265*

264-353 **Kokubun, Susumu.** Report on observation of geomagnetic micropulsations at Syowa Station in 1966 [in Japanese with English abs.]: Antarctic Rec., no. 31, p. 1-11, illus., 1968.

269-405 **Kokubun, Susumu; Oguti, Takasi.** Hydromagnetic emissions associated with storm sudden commencements: Rept. Ionsophere and Space Research Japan, v. 22, nos. 1-2, p. 45-59, illus., table, 1968.

265-316 **Kolbenheyer, T.** Die Schwereanomalien eines horizontalen rechtwinkligen Vielecks [The gravity anomalies of a horizontal right-angled polygon (with English summ.)]: Geoexploration, v. 6, no. 1, p. 9-18, illus., 1968.

272-221 **Kolbenheyer, Tibor.** Das Gravitationsfeld eines homogenen Vielecks [The gravitation field of a homogeneous polygon (with Czech and Russian abs.)]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 91-106, illus., 1968.

Kolcak, D. See *Ispir, Y. 274-372*

Kolesnichenko, V. P. See *Bernshteyn, D. A. 270-522*

269-277 **Kolesnik, A. P.; Mashkovich, K. A.; Khramoy, A. I.; Kozlenko, S. P.; Kulakov, N. V.; Ezdrin, M. B.; Einger, N. S.; Korobov, D. S.** Bortovaya zona Prikaspiyskoy vpadiny v svete geofizicheskikh i geokhimicheskikh issledovaniy [Marginal zone of the Caspian basin in the light of geophysical and geochemical investigations (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 197-201, illus., 1968.

Kolesnikov, V. V. See *Benevolenskiy, I. P. 272-386*

266-158 **Kolesnikov, Yu. A.; Malinovskaya, L. N.; Sladkov, Yu. V.** Spektral'naya kalibrovka seysmicheskikh stantsiy [Spectral calibration of seismic stations], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 287-316, illus., tables, 1968.

Kolesova, V. I. See *Pudovkin, I. M. 267-426*

Kolesova, V. I. See *Pudovkin, I. M. 267-427*

Kolesova, V. I. See *Pudovkin, I. M. 269-416*

Kolesova, V. I. See *Pudovkin, I. M. 271-351*

Kolesova, V. I. See *Pudovkin, I. M. 273-365*

273-276 **Kolmagorov, V. G.; Kolmogorova, P. P.** Kharakteristika sovremennykh vertikal'nykh dvizheniy, geofizicheskikh poley i geologicheskikh elementov po profilyu Krasnoyarsk-Irkutsk [Characteristics of recent vertical movements, the geophysical fields, and the geological elements along the Krasnoyar-Irkutsk profile (with English summ., p. 154)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 68-74, illus., tables, 1968.

270-090 **Kolmogorov, V. G.; Kolmogorova, P. P.** Ob uchete prilivnykh popravok pri izuchenii sovremennykh vertikal'nykh dvizheniy zemnoy poverkhnosti [On taking into account tidal corrections in studying recent vertical movements of the Earth's surface]: Vyssh. Ucheb. Zavedeniy Izv., Geodeziya i Aerofotos"yemka, no. 3, p. 90-97, illus., table, 1968.

Kolmogorov, Yu. A. See *Yesenov, Sh. Ye. 269-272*

Kolmogorova, P. P. See *Kolmogorov, V. G. 270-090*

Kolmogorova, P. P. See *Kolmagorov, V. G. 273-276*

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Kolomiyets, A. S. See *Panasenko, G. D. 267-132*

274-336 **Kolomiytseva, G. I.; Tyurmina, L. O.** An experiment in the use of satellite data for the study of secular variations: Geomagnetism and Aeronomy, v. 8, no. 6, p. 863-866, illus., table, 1968.

270-532 **Koloskov, Yu. P.** Skhema sinkhronizatsii tsifrovogo karotazhnogo preobrazovatelya [Scheme of synchronization of a digital logging converter]: Geofiz. Apparatura, no. 36, p. 167-168, illus., 1968.

271-576 **Kolosov, A. L.; Gorodentseva, I. A.** Rozv'yazannya pryamoyi zadachī elektrometrī sverdlovym za metodom elektrychnoho oporu na TsOM [Computer solution of the direct problem of electrical logging by the electrical resistivity method (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 10, p. 916-919, illus., 1968.

264-565 **Kołtonski, Wacław.** Nowoczesne zastowanie akustyki w geofizyce i gornistwie (cz. II) [Modern application of acoustics in geophysics and mining, Pt. 2 (with English and Russian summ.)]: Przegląd. Geol., no. 4, p. 183-186, illus., 1968.

Koltovskaya, F. I. See *Gerus, E. A. 273-040*

Kol'tsova, T. V. See *Gerling, E. K. 275-026*

Komaki, Shauzow. See *Onda, Isao. 264-163*

266-547 **Komarnitskiy, N. I.** Zones and planes of weakness in rocks and slope stability [translation of "Vliyaniye zon i poverkhnostey oslableniya v porodakh na ustoychivost' otkosov"]: New York, Consultants Bureau, 108 p., illus., tables, 1968 Russian version, Moscow, Izdatel'stvo "Nauka", 1966.

273-507 **Komarov, S. G.; Zhuvagin, I. G.; Brodskiy, P. A.; Gulin, Yu. A.; Trufanov, V. V.; Galyavich, A. Shch.** Geofizicheskiye issledovaniya ekspluatsiruyushchikhsya skvaz hin [Geophysical investigations in producing wells]: Neftegazovaya Geologiya Geofizika, no. 12, p. 26-29, illus., 1968.

Komarov, V. B. See *Shilin, B. V. 270-121*

271-221 **Komarov, Yu. V.; Khramov, P. M.; Sherman, S. I.** Tektono-magmaticheskaya evolyutsiya v vulkano-plutonicheskikh poyasakh [Tectonomagmatic evolution in volcanic-plutonic belts (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Iz datel'stvo "Nauka," p. 231-232, 1968.

Komura, K. See *Sakanoue, M. 269-040*

Komura, Kazuhisa. See *Sakanoue, Masanobu. 269-383*

273-129 **Kondo, G.** The variation of the atmospheric electric field at the time c earthquake [with Japanese abs.]: Kakioka Magnetic Observatory Mem., v. 13, no. p. 11-23, illus., table, 1968.

Kondorskaya, N. V. See *Vvedenskaya, N. A. 264-128*

265-161 **Kondorskaya, N. V.** O rabote assotsiatsii seysmologii i fiziki nedr Zemli v perio XIV general'noy assambley MGGS [On the work of the Association of Seismolog and Physics of the Earth's Interior in the period of the 14th General Assembly of th I.U.G.G.]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 107-111, 1968.

Kondorskaya, N. V. See *Vvedenskaya, N. A. 265-163*

Kondorskaya, N. V. See *Willmore, P. L. 267-125*

273-138 **Kondorskaya, N. V.; Slavina, L. B.** Nekotoryye rezul'taty izucheniya vremen probega prodol'nykh voln [Some results of a study of longitudinal wave traveltimes]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 19-36, illus., tables, 1969.

265-275 **Kondrasheva, N. V.; Kruglyakov, V. V.** Stroyeniye poverkhnosti paleozoyskogo skladchatogo fundamenta v morskom Prikarabogaz'ye [Structure of the surface of the Paleozoic folded basement in the marine Karabogaz]: Neftegazovaya Geologiya i Geofizika, no. 6, p. 30-34, illus., 1968.

Kondrasheva, N. V. See *Malovitskiy, Ya. P. 275-381*

270-389 **Kondratovich, Yu. V.; Isayev, V. S.; Burdova, T. F.** Primer ispol'zovaniya sinteticheskikh seysmogramm dlya otsenki sravitel'noy intensivnosti odnokratnykh i kratnykh otrazheniy [An example of the use of synthetic seismograms for estimating relative intensity of simple and multiple reflections]: Razved. Geofizika, no. 29, p. 41-45, illus., 1968.

264-485 **Kondrat'yev, I. K.** Korrektnost' i pomekhoustoychivost' sposobov tsifrovoy obratnoy fil'tratsii seysmicheskikh trass [Correctness and noise resistance of methods of digital inverse filtering of seismic traces]: Prikladnaya Geofizika, no. 50, p. 3-22, 1967.

266-514 **Kondrat'yev, I. K.** O korrektnosti zadachi obratnoy fil'tratsii seysmicheskikh zapisey [On the correctness of the problem of inverse filtering of seismic records]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 48-50, 1968.

266-534 **Kondrat'yev, O. K.** Universal'naya programma dlya rascheta sinteticheskikh seysmogramm [A universal program for calculating synthetic seismograms], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 275-286, illus., 1968.

Kondrat'yev, R. M. See *Mekhtiyeva, V. L. 275-294*

274-483 **Konen, Charles E.; Helander, Donald P.** A computer analysis of shaly sands using multiple porosity logging devices, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. Q1-Q26, illus., table, 1969.

Konish, K. See *Sakanoue, M. 269-040*

Konishi, Kenji. See *Shibata, Ken. 271-032*

Kono, M. See *Ozima, M. 264-404*

Kono, M. See *Ozima, M. 264-406*

268-420 **Kono, M.; Nagata, T.** Intensity of the Earth's magnetic field in geological time—[Pt.] 1, Late Pliocene in the southwestern U.S.A.: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 211-220, illus., tables, 1968.

270-162 **Kononov, V. E.; Tronov, Yu. A.** Perspektivy neftegazonosnosti nizhne- i srednemiotsenovykh otlozheniy Severnogo Sakhalina [Prospects for oil and gas in the lower and middle Miocene formations of South Sakhalin]: Geologiya Nefti i Gaza, no. 11, p. 14-19, illus., 1968.

Kononov, V. I. See *Ivanov, V. V. 271-557*

Konoplev, Yu. V. See *Kitsenko, Yu. A. 265-685*

270-531 **Konoplev, Yu. V.** Ob ispol'zovanii apparatury INNK dlya razdeleniya neftenosnykh i vodonosnykh plastov [On the use of pulsed neutron-neutron logging for separating oil.bearing and water-bearing formations]: Geofiz. Apparatura, no. 36, p. 165-167, illus., 1968.

Konoplev, Yu. V. See *Bespalov, D. F. 272-560*

268-560 **Konovalov, M. M.** O rezul'tatakh opytnykh rabot po otsenke tochnosti i real'nosti dannykh MRNP [On the results of experimental work on the assessment of the accuracy and reality of controlled-direction-pickup data]: Prikladnaya Geofizika, no. 53, p. 71-84, illus., tables, 1968.

Konovalov, M. M. See *Matveyev, V. G. 268-568*

268-554 **Konovalov, M. M.** Izucheniye krutikh sklonov solyanokupol'nykh struktur seysmorazvedkoy metodom difragirovannykh i golovykh voln [Study of the steep flanks of salt dome structures by the seismic exploration method of diffracted and head waves]: Prikladnaya Geofizika, no. 52, p. 49-66, illus., 1968.

Konovalov, Yu. G. See *Monastyrev, V. K. 264-518*

Konovalov, Yu. G. See *Monastyrev, V. K. 264-519*

270-254 **Konradi, Andrei.** 135-1650 kev solar protons after the flare of July 7, 1966, observed in the magnetotail and magnetosheath: Jour. Geophys. Research, v. 74, no. 5, p. 1158-1163, illus., table, 1969.

Konradi, Andrei. See *Kaufmann, Richard L. 274-313*

264-432 **Konstantinov, G. N.; Konstantinova, L. S.; Sergeyev, V. O.** Metodika perescheta magnitnogo polya v verkhneye poluprostranstvo na primere zapadnoy chasti Sibirskoy platformy [Method of recalculation to an upper half space in the example of the western part of the Siberian Lowland]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 127-139, illus., 1964.

264-436 **Konstantinov, G. N.; Konstantinova, L. S.** Opyt primeneniya metoda modelirovaniya dlya interpretatsii magnitnogo polya Tashtagol'skogo zhelezorudnogo mestorozhdeniya [Attempt to use the modeling method for interpretation o the magnetic field of the Tashtagol' iron ore deposit]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 86-96, illus., 1967.

268-288 **Konstantinov, G. N.** K metodike resheniya pryamoy trekhmernoy zadachi magnitnoy i gravitatsionnoy razvedki dlya zhelezorudnykh mestorozhdeniy Altaye-Sayanskoy oblasti [On the procedure of solving the direct problem of magnetic an gravity surveying for the iron ore deposits of the Altay-Sayan district]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 7, p. 108-114, illus., 1968.

270-296 **Konstantinov, G. N.; Konstantinova, L. S.** K metodike modelirovaniya magnit nykh poley Tashtagol'skogo zhelezorudnogo mestorozhdeniya [On the procedure o modeling the magnetic fields of the Tashtagol iron ore deposit (with English summ. p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p 87-95, illus., 1968.

274-413 **Konstantinov, V. P.; Gorodnitskiy, A. M.** Radioaktivnost' v poverkhnostno sloye vod Chernogo morya i yeye svyaz' s nekotorymi fizicheskimi kharakteristikam [Radioactivity in the surface layer of water in the Black Sea and its relationship t some physical characteristics], *in* Geofizicheskiye metody razvedki v Arktike (Sbor nik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 236-23 1968.

273-149 **Konstantinova, A. G.; Mysina, L. G.; Ivanova, G. M.** O prognoze dinamicheskik yavleniy v ugol'nykh shakhtakh po vozrastaniyu shumnosti [On the prediction o dynamic phenomena in coal mines on the basis of the increase in noisiness]: Aka Nauk SSSR Izv. Fizika Zemli, no. 2, p. 75-81, illus., tables, 1969.

Konstantinova, L. S. See *Konstantinov, G. N. 264-432*

Konstantinova, L. S. See *Konstantinov, G. N. 264-436*

Konstantinova, L. S. See *Konstantinov, G. N. 270-296*

Kontarovich, R. S. See *Isayev, Ye. N. 273-209*

Koo, J. D. See *Koo, J. H. 274-378*

274-378 **Koo, J. H.; Kim, J. T.; Koo, J. D.** Report on magnetic prospecting in Choong Ju sheet [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 5-36, illus., tables, 1968.

274-379 **Koo, J. H.; Yew, K. Y.; Cho, D. H.** Magnetic susceptibility of rocks in Korea [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 93-105, illus., tables, 1968.

Koo, J. H. See *Kim, C. S. 274-429*

Koo, Ja Hak. See *Kim, Chong Su. 267-262*

268-106 **Koomen, M. J.; Tousey, R.; Seal, R. T., Jr.** The lunar crescent and earthshine observed at 2° solar elongation, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 187-195, illus., 1968.

269-146 **Kopal, Zdenek.** Exploration of the Moon by spacecraft: London, Oliver and Boyd, 88 p., illus., 1968.

Kopnin, M. V. See *Afanas'yev, N. L. 266-349*

Kopnin, M. V. See *Yun'kov, Ya. A. 274-272*

Kopp, E. See *Herr, W. 269-051*

Korba, P. S. See *Aksent'yeva, Z. N. 266-167*

Korchagin, V. P. See *Makarov, K. K. 275-172*

271-391 **Korennoy, Ye. P.; Tsirel', V. S.; Yakovlev, G. Ya.** Primeneniye dinamicheskoy polyarizatsii v yaderno-pretsessionnom aeromagnitometre [Use of dynamic polarization in the nuclear precession airborne magnetometer]: Geofiz. Apparatura, no. 31, p. 35-39, illus., 1967.

Koresawa, Sadayuki. See *Nagumo, Shozaburo. 271-076*

Koresawa, Sadayuki. See *Nagumo, Shozaburo. 271-077*

268-145 **Korf, M. G.** Voprosy seysmostoykosti zemlyanykh plotin po zarubezhnym issledovaniyam [The problem of the seismic stability of earth dams according to foreign investigations], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 151-157, illus., tables, 1967.

Korkh, Z. A. See *Kirichek, M. A. 270-514*

Körmende, Alpár. See *Hagymegi, Laszlo. 270-281*

273-041 **Kornblum, Joseph J.** Micrometeoroid interaction with the atmosphere: Jour. Geophys. Research, v. 74, no. 8, p. 1893-1907, illus., tables, 1969.

273-042 **Kornblum, Joseph J.** Concentration and collection of meteoric dust in the atmosphere: Jour. Geophys. Research, v. 74, no. 8, p. 1908-1919, illus., tables, 1969.

271-156 **Korneyeva, E. A.** Vysokovol'tnyy stabilizator napryazheniya dlya fotometriya [High-voltage voltage stabilizer for photometry]: Geofiz. Apparatura, no. 31, p. 159-161, illus., 1967.

Kornilov, F. M. See *Smirnov, G. S. 269-592*

266-202 **Korniyets, D. V.** Metodika izucheniya skorosti (V_{Pm}) pri vysokikh davleniyakh s ispol'zovaniyem akusticheskoy linii zaderzhki [Procedure for studying velocity (V_{Pm}) at high pressures using an acoustic delay line (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 32-38, illus., 1968.

Korniyets, D. V. See *Lebedev, T. S. 266-478*

Korobov, D. S. See *Kolesnik, A. P. 269-277*

Korolenko, N. G. See *Blokh, I. M. 270-152*

267-175 **Korol'kov, Yu. S.** Nekotoryye osobennosti levykh vetvey krivykh chastotnogo zondirovaniya [Some features of the left branches of frequency sounding curves]: Razved. Geofizika, no. 27, p. 44-47, illus., 1968.

270-150 **Korol'kov, Yu. S.** Sostavleniye krivykh vstrechnogo i vzaimno-vstrechnogo zondirovaniya stanovleniyem polya [Plotting of curves of reversed and mutually reversed field buildup sounding]: Razved. Geofizika, no. 29, p. 76-79, illus., 1968.

Körös, I. See *Sebestyen, Karoly. 270-504*

Korotkova, O. N. See *Afanas'yev, G. D. 268-156*

267-201 **Korsakov, O. D.; Yershova, A. P.** K voprosu o tektonicheskom stroyenii yugo-zapadnoy chasti Aral'skogo morya [On the problem of the tectonic structure of the southwestern part of the Aral Sea]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 8-11, illus., 1968.

269-650 **Korsakov, O. D.; Milashina, K. G.; Shkurko, M. D.; Yunov, A. Yu.** Rezul'taty seysmicheskikh issledovaniy na morskom prodolzhenii Tigil'skogo podnyatiya (Zapadnaya Kamchatka) [Results of seismic investigations of the offshore continuation of the Tigil uplift (West Kamchatka)]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 20-24, illus., 1968.

266-367 **Kortsenshteyn, V. N.** Zhuravskaya geotermicheskaya anomaliya [The Zhuravskaya geothermal anomaly]: Akad. Nauk SSSR Doklady, v. 181, no. 1, p. 175-177, illus., 1968.

Kortsenshteyn, V. N. See *Gavrilov, Ye. Ya. 267-365*

270-167 **Korvin, Gábor.** Empirikus függvények differenciálásáról [On differentiation o empirical functions (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 194-197, 1968.

Koryakin, V. S. See *Chizov, O. P. 264-241*

Koryakin, Ye. D. See *Gaynanov, A. G. 267-325*

266-165 **Korzhauv, T. K.; Ulomov, V. I.** Proyavleniye sovremennoy tektoniki seysmichnost' Kyzylkumov [Manifestations of recent tectonics and seismicity of th Kyzyl Kums]: Uzbek. Geol. Zhur., no. 3, p. 69-75, illus., table, 1966.

264-572 **Korzhev, A. A.** Povysheniye effektivnosti metoda gamma-gamma-karotazh [Enhancing the efficiency of the gamma-gamma logging method]: Prikladnay Geofizika, no. 50, p. 189-197, illus., 1967.

Korzhuk, V. I. See *Davidenko, F. K. 264-589*

268-635 **Kosenkov, I. M.** Raschet elektricheskikh poley dlya mikrozondov, imeyushchikh elektrody s aksial'noy simmetriyey [Calculation of the electrical fields for microsondes having electrodes with axial symmetry]: Prikladnaya Geofizika, no. 53, p. 160-170, illus., 1968.

268-639 **Kosenkov, O. M.** Primeneniye razlichnykh zondov bokovogo karotazha v neftegazonosnykh skvazhinakh Tatarii [Use of various lateral logging sondes in oil and gas wells in Tatary]: Neftegazovaya Geologiya i Geofizika, no. 10, p. 41-45, illus., 1968.

Koshechkin, B. I. See *Dolivo-Dobrovol'skiy, A. V. 266-248*

Koshelev, I. V. See *Zverev, P. N. 270-349*

274-208 **Koshevoy, V. V.; Pervushin, V. N.** Modelirovaniye metoda geoakusticheskogo prozvuchivaniya [Modeling the method of geoacoustic sounding], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 129-137, illus., 1965.

267-632 **Koshlyak, V. A.** Primeneniye impul'snogo neytron-neytronnogo metoda (INNM) pri kontrole razrabotki neftyanykh mestorozhdeniy [Use of the pulsed neutron-neutron method (INNM) in monitoring the development of oil fields]: Geologiya Nefti i Gaza, no. 7, p. 46-49, illus., 1968.

Koslosky, J. A. See *Woollard, G. P. 271-270*

264-494 **Kosminskaya, I. P.** Sovremennyye seysmicheskiye dannyye ob okeanicheskoy i kontinental'noy zemnoy kore [Modern seismic data on the oceanic and continental crust]: Moskov. Obshch. Ispytateley Prirody Byull., Otdel Geol., no. 5, p. 8-17, illus., 1967.

Kosminskaya, I. P. See *Belousov, V. V. 265-349*

265-356 **Kosminskaya, I. P.; Zverev, S. M.** Abilities of explosion seismology in oceanic and continental crust and mantle studies, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1091-1100, illus., 1968.

Kosminskaya, I. P. See *Gaynanov, A. G. 266-245*

268-311 **Kosminskaya, I. P.; Zverev, S. M.** Deep seismic sounding in the transition zones from continents to oceans, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 122-130, illus., 1968.

Kosminskaya, I. P. See *Gaynanov, A. G. 268-315*

265-655 **Kosov, V. M.** Osobennosti metodiki polevykh rabot i postroyeniya seysmicheskikh razrezov v usloviyakh diapirovoy skladchatosti Tamanskogo poluostrova [Features of the procedure of field operations and plotting sections in the conditions of diapiric folding in the Taman Peninsula]: Razved. Geofizika, no. 24, p. 23-29, illus., 1967.

265-241 **Kostecki, Andrzey.** Magnitotelluricheskoye zondirovaniye pri nalichii sloya s vertikal'nym gradiyentom soprotivleniya [Magnetotelluric sounding in the presence of a layer with vertical resistivity gradient (with Polish summ.)]: Acta Geophys. Polonica, v. 15, no. 4, p. 365-374, illus., tables, 1967.

264-230 **Kostenko, N. P.** K neotektonike Vitimo-Patomskogo nagor'ya [On the neotectonics of the Vitim-Patom Highlands]: Zhizn' Zemli, no. 4, p. 21-32, illus., 1967.

Kostenko, N. P. See *Kazakhevich, Yu. P. 271-228*

266-263 **Köster, R.** Postglacial sea-level changes in the western Baltic region in relation to worldwide eustatic movements [with German abs.], *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 407-419, illus., 1968.

Koster, S. See *Goodell, H. G. 267-437*

264-130 **Kostina, A. F.** Zemletryaseniya Kryma [Earthquakes in Crimea], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 14, illus., table, 1967.

265-165 **Kostina, A. F.; Kapitonova, S. A.; Dubinskiy, I. B.** Zemletryaseniya Kryma [Earthquakes of Crimea], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 18-19, illus., table, 1967.

265-205 **Kostrov, B. V.; Nikitin, L. V.** Izlucheniye uprugikh voln pri razryve sploshnosti uprugoy sredy. Ploskaya zadacha [Radiation of elastic waves upon disruption of the continuity of an elastic medium—Plane problem]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 32-40, illus., 1968.

267-147 **Kostrov, B. V.** Obratnaya zadacha teorii ochaga zemletryaseniya [Inverse problem of the theory of an earthquake focus]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 18-29, 1968.

267-148 **Kostrov, B. V.; Nikitin, L. V.** Vliyaniye predvaritel'nogo napryazhennogo sostoyaniya na rasprostraneniye ploskikh seysmicheskikh voln [Effect of the previous stress state on the propagation of plane seismic waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 30-38, illus., 1968.

264-129 **Kostyuk, O. P.; Rudenskaya, I. M.** Zemletryaseniya Karpat [Earthquakes in the Carpathians], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR p. 12-13, illus., table, 1967.

265-164 **Kostyuk, O. P.; Rudenskaya, I. M.; Ivashchuk, A. I.; Vasilenko, Ye. M.** Zemletryaseniya Karpat [Earthquakes in the Carpathians], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 13-17, illus., tables 1967.

Kosztolanyi, Ch. See *Roubault, M. 273-035*

Kotake, Yoshiko. See *Usami, Tatsuo. 264-162*

Kotake, Yoshiko. See *Skoko, Dragutin. 271-075*

269-684 **Kotenev, B. N.** Morskiye geologicheskiye issledovaniya v rayone Islandii [Marin geologic investigations in the vicinity of Iceland (with English summ.)]: Okeanologiya, v. 8, no. 6, p. 1049-1052, 1968.

Kotenko, N. N. See *Vvedenskaya, N. A. 264-128*

Kotenko, N. N. See *Vvedenskaya, N. A. 265-163*

Kotlovskaya, F. I. See *Semenenko, N. P. 273-020*

264-412 **Kotlyarevskiy, L. N.** K voprosu ob usloviyakh i prichine namagnichennosti intruzivnykh porod v Uzbekistane [On the problem of the conditions and causes of magnetization of intrusive rocks in Uzbekistan]: Uzbek. Geol. Zhur., no. 2, p. 70-7 1968.

272-247 **Kotov, N. V.; Mil'kevich, R. I.; Turchenko, S. I.** Paleotermometriya muskovi soderzhashchikh metamorficheskikh porod po dannym rentgenovskogo khimicheskogo izucheniya muskovitov [Paleothermometry of metamorphic roc containing muscovite according to data of X-ray and chemical study of th muscovites]: Akad. Nauk SSSR Doklady, v. 184, no. 5, p. 1180-1182, illus., 1969.

270-515 **Kotov, P. T.; Mel'nikov, D. A.** K opredeleniyu yemkosti pogloshcheniya porod po adsorbtsii metilenovogo golubogo [On the determination of the absorption capacity on the basis of adsorption of methylene blue]: Razved. Geofizika, no. 29, p. 96-102, illus., tables, 1968.

266-100 **Kovach, R. L.; Glover, P.** Travel times of PKP in the range 115°<Δ<140°: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 367-376, illus., tables, 1968.

265-110 **Kovach, Robert L.** Earthquake forecasting: Geoscience News, v. 1, no. 5, p. 9-11, illus., 1968.

Kovach, Robert L. See *Meister, Laurent J. 266-087*

Kovach, Robert L. See *Breiner, Sheldon. 266-109*

Kovach, Robert L. See *Breiner, Sheldon. 266-275*

274-366 **Kovacheva-Nozharova, M.** Ancient magnetic field in Bulgaria: Bolgar. Akad. Nauk Doklady, v. 21, no. 8, p. 761-763, illus., table, 1968.

269-159 **Koval', I. K.** Analiz fazovoy zavisimosti bleska Marsa [Analysis of the phase dependence of brightness of Mars (with English summ.)]: Astron. Zhur., v. 45, no. 4, p. 841-849, illus., tables, 1968.

Koval'chuk, F. S. See *Bagautdinov, A. K. 271-568*

267-640 **Koval'chuk, I. N.; Gorbenko, L. A.; Nechayeva, A. F.** Issledovaniye elektricheskikh parametrov bronirovannykh karotazhnykh kabeley [Investigations of the electrical parameters of armored logging cables]: Geofiz. Apparatura, no. 34, p. 151-163, illus., tables, 1967.

270-128 **Kovalenko, N. D.; Kovalenko, V. F.; Tarkhov, A. G.** Zur Anwendung elektromagnetischer Hochfrequenzverfahren im Bergbau [On the application of electromagnetic high-frequency procedures in mining]: Freiberger Forschungshefte, C 226, p. 121-126, illus., 1967.

Kovalenko, V. F. See *Kovalenko, N. D. 270-128*

264-356 **Kovalevskiy, I. V.** Relation of geomagnetic activity to the energy flux density of the quiet solar wind: Geomagnetism and Aeronomy, v. 7, no. 6, p. 797-799, illus., table, 1967.

271-166 **Kovalevsky, J.; Barlier, F.; Stellmacher, I.** Les expériences géodésiques sur les satellites D 1 – Description et premiers résultats [The geodetic experiments on the D 1 satellites – Description and first results]: Bull. Géod., no. 88, p. 175-178, 1968.

272-082 **Kovaly, John J.** Satellite high resolution radar mapping techniques, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 417-433, illus., tables, 1968.

270-116 **Kover, Allan N.** Sidelooking radar imagery, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 781-785, illus., 1968.

Kovtun, A. A. See *Van-Chi, Fam. 264-375*

265-245 **Kovtun, A. A.; Raspopov, O. M.; Troitskaya, V. A.; Kazak, B. N.; Lorand, J.** Magnetotelluricheskoye issledovaniye rayona Port of Frans (Kergelen) [Magnetotelluric investigations of the Port of France region (Kerguelen)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 89-92, illus., 1968.

Kovtun, A. A. See *Gol'tsman, F. M. 275-150*

Kovylin, V. M. See *Beresnev, A. F. 274-443*

Koyama, Kenju. See *Sakanoue, Masanobu. 269-383*

Koyanagi, R. Y. See *Fiske, R. S. 264-552*

264-092 **Koyanagi, Robert Y.** Earthquakes from common sources beneath Kilauea and Mauna Loa Volcanoes in Hawaii from 1962 to 1965: U.S. Geol. Survey Prof. Paper 600-C, p. C120-C125, illus., tables, 1968.

272-105 **Koyanagi, Robert Y.** Hawaiian seismic events during 1966, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B113-B116, illus., 1969.

271-574 **Kozachok, I. A.** Nablyzhene formulyuvannya zadachī pro spovī'nennya neytronīv [Approximate formulation of the problem of slowing-down of neutrons (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 4, p. 327-332, 1968.

271-575 **Kozachok, I. A.; Kulik, V. V.** Rozpodīl spovīl'nenykh neytronīv u seredovyshchī, obmezhenomu sferychnoyu poverkhneyu [Distribution of slowed neutrons in a medium bounded by a spherical surface (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 6, p. 529-533, illus., 1968.

271-110 **Kozai, Yoshihide.** Love's number of the Earth derived from satellite observations: Bull. Géod., no. 89, p. 355-357, tables, 1968.

265-679 **Kozel, Josef.** Parametr poristosti glinistykh porod [The porosity parameter of shaly rocks]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 103-106, illus., tables, 1968.

Kozin, I. D. See *Kazarin, V. A. 274-352*

264-521 **Kozlenko, P. P.** Opyt i geologicheskiye rezul'taty seysmicheskikh issledovaniy zon byklinivaniya yurskikh otlozheniy Barabinskogo rayona [Experience and geological results of seismic investigations of the zone of pinch-out of Jurassic sediments of the Barabin Region]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 54-58, illus., 1964.

Kozlenko, S. P. See *Kolesnik, A. P. 269-277*

Kozlosky, J. A. See *Woollard, G. P. 270-206*

270-291 **Kozlov, A. N.; Perunov, B. S.; Fastovskiy, U. V.** O dvukh sposobakh nastroyki kvantovogo samogeneriruyushchego magnitometra [On two ways of tuning a self-generating quantum magnetometer]: Geofiz. Apparatura, no. 36, p. 53-61, illus., 1968.

267-134 **Kozlov, A. V.; Malamud, A. S.** Issledovaniye zavisimosti koeffitsiyenta zatukhaniya seysmicheskikh kolebaniy ot glubiny ochaga [Investigation of the dependence of the coefficient of seismic wave absorption on depth]: Akad. Nauk Tadzhik, SSR Doklady, v. 11, no. 1, p. 30-33, illus., tables, 1968.

267-236 **Kozlov, M. T.** Prostrantsvennaya unasledovanost' i razvitiye tektonicheskikh dvizheniy v tsentral'noy i yugo-vostochnoy chastyakh Kol'skogo poluostrova [Spatial inheritance and evolution of tectonic movements in the central and southeastern parts of the Kola Peninsula], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 50-60, 1968.

268-246 **Kozlov, M. T.; Tyuremnov, V. A.** Ispol'zovaniye plotnosti i poristosti dlya geologicheskogo raschleneniya diabazovykh pokrovov proterozoya [Use of density and porosity for the geologic subdivision of the Proterozoic diabase sheets], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 65-68, illus., 1968.

Kozlov, V. D. See *Tauson, L. V. 275-024*

269-148 **Kozlov, V. V.; Sulidi-Kondrat'yev, Ye. D.** The main problems of selenotectonics, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 43-51, illus., 1968.

264-514 **Kozlov, Ye. A.** Ob obratnoy fil'tratsii zapisey MOV [On inverse filtering of reflection records]: Prikladnaya Geofizika, no. 51, p. 45-52, 1968.

268-557 **Kozlov, Ye. A.; Kalinina, R. A.; Kedrova, T. S.; Blashchinskaya, I. L.** Ob effektivnosti obratnoy fil'tratsii zapisey MOV [On the effectiveness of inverse filtering of reflection records]: Prikladnaya Geofizika, no. 53, p. 8-22, illus., 1968.

268-287 **Kozlova, L. P.** Izmeneniya plotnosti rouksinskikh slantsev v zavisimosti ot stepeni metamorfizma [Change in density of the Rouksa schists as a function of the grade of metamorphism], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 276-280, table, 1968.

Kozmodem'yanskiy, V. V. See *Mirchink, M. F. 269-278*

Koznevnikov, I. I. See *Budnikov, N. P. 275-193*

Kozubskaya, G. Ye. See *Tyapkin, K. F. 269-274*

266-217 **Kozulin, Yu. N.; Platon, V. D.** Elektricheskoye pole vertikal'nogo magnitnogo dipolya nad dvykhsloynoy srede [Electrical field of a vertical magnetic dipole over a two-layered medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 57-67, illus., 1968.

Koz'yakova, K. Ya. See *Gubanenko, L. A. 267-264*

Kozyar, V. F. See *Garris, M. A. 267-051*

275-173 **Kozyrev, V. D.; Levchenko, I. G.; Sulimov, I. N.; Feygin, Ye. B.** Perspektivy neftegazonosnosti zapada Sibirskoy platformy i plan regional'nykh geologo-geofizicheskikh rabot na neft' i gaz na 1971-1980 gg. [Oil and gas prospects of the west of the Siberian platform and the plan for regional geological and geophysical operations on oil and gas for 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 18-22, 1969.

Kozyrev, Ye. I. See *Druzhinin, V. S. 273-468*

270-222 **Krasikov, N. N.** Ob elektronnom gravimetre, ispol'zuyushchem stoyachuyu ul'travysokochastotnuyu (UVCh) volnu [On an electronic gravimeter using stable ultrahigh frequency (UHF) waves]: Geofiz. Apparatura, no. 36, p. 169-170, 1968.

270-223 **Krasikov, N. N.** K probleme primeneniya effekta messbauera pri izmerenii polya sily tyazhesti [On the problem of using the Mössbauer effect in measurements of the gravity field]: Geofiz. Apparatura, no. 36, p. 170-171, 1968.

Krasin, L. A. See *Arsh, E. I. 269-250*

Krasnobayev, A. A. See *Ovchinnikov, L. N. 265-048*

Krasnobayev, A. A. See *Orlov, I. V. 269-085*

67-194 **Krasnobayeva, A. G.** Pervyye rezul'taty magnito-telluricheskogo zondirovaniya po Sverdlovskomu peresecheniyu [First results of magnetotelluric sounding along the Sverdlovsk traverse], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 353-354, illus., 1968.

69-320 **Krasnopevtseva, G. V.; Rezanov, I. A.** Sootnosheniye noveyshikh dvizheniy i moshchnosti zemnoy kory na primere Kavkaza i Al'p [Relationship of recent movements to crustal thickness, illustrated by the Caucasus and Alps]: Akad. Nauk SSSR Doklady, v. 179, no. 6, p. 1413-1416, illus., 1968.

Krasnopolskiy, V. A. See *Lebedinskiy, A. I. 268-097*

Krasnoshchek, A. Ya. See *Popovich, V. S. 275-244*

267-182 **Krasnoshchekov, P. S.; Suvorov, Yu. P.** Integral'noye uravneniye dlya potentsiala istochnika toka v neodnorodnoy srede [An integral equation for the potential of a current source in an inhomogeneous medium]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 8, p. 120-126, illus., 1968.

Krasny, M. L. See *Tuyezov, I. K. 268-320*

266-246 **Krasovskiy, S. S.; Bur'yanov, V. B.** Perspektivy poiskov almazonosnykh struktur v Priazov'ye geofizicheskimi metodami [Prospects of prospecting for diamond-bearing structures in the Azov region by geophysical methods (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 31-36, 1967.

Krasovskiy, S. S. See *Lebedev, T. S. 275-194*

272-343 **Krasovskiy, V. I.** The upper atmosphere as a regulator of geomagnetic storms substorms and auroras [with French and Russian abs.]: Annales Geophysique, v. 24 no. 4, p. 1053-1067, illus., table, 1968.

273-270 **Krass, M. S.; Ushakov, S. A.** Nekotoryye effekty glyatsioizostaticheskoy dinamik verkhney mantii v periferiynoy zone oblastey materikovykh oledeneniy [Some effects of glacio-isostatic dynamics of the upper mantle in the peripheral zone of regions of continental glaciation]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 48-52 illus., 1969.

271-154 **Krasyukov, V. A.; Stepanov, B. S.** Pribor dlya interpretatsii geofizicheskikh anomaliy EIP-2 [The EIP-2 instrument for interpretation of geophysical anomalies] Geofiz. Apparatura, no. 31, p. 119-122, illus., 1967.

Kratts, K. O. See *Zander, V. N. 265-306*

Kratz, K. See *Gerling, E. K. 268-025*

273-019 **Kratz, K. O.; Gerling, E. K.; Lobach-Zhuchenko, S. B.** The isotope geology of th Precambrian of the Baltic Shield, *in* Geochronology of Precambrian stratifie rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci v. 5, no. 3, pt. 2, p. 657-660, illus., 1968.

267-629 **Krauklis, P. V.; Molotkov, L. A.** K teorii seysmicheskogo karotazha v obsazhen nykh skvazhinakh [On the theory of seismic logging in cased wells]: Akad. Nau SSSR Izv. Fizika Zemli, no. 9, p. 39-46, table, 1968.

264-223 **Krause, Dale C.** Bathymetry and geologic structure of the north-western Tasma Sea-Coral Sea-South Solomon Sea area of the south-western Pacific Ocean: Ne Zealand Dept. Sci. and Indus. Research Bull. 183 (New Zealand Oceanog. Ins Mem., no. 41), 48 p., illus., tables, 1967.

Kravchenko, A. P. See *Sapuzhak, Ya. S. 266-227*

Kravchenko, E. V. See *Zhirov, K. K. 272-039*

Kravchenko, M. P. See *Zhirov, K. K. 267-044*

Kravchenko, M. P. See *Zhirov, K. K. 272-039*

Kravchenko, V. A. See *Sapuzhak, Ya. S. 266-227*

272-385 **Kravchenko, Yu. B.** O vozmozhnosti primeneniya magnitorazvedki dlya poisk mestorozhdeniy olova [On the possibility of using magnetic surveying to prospect f tin deposits]: Razvedka i Okhrana Nedr, no. 11, p. 42-47, illus., table, 1968.

272-236 **Krěmář, B.** Anwendung der Geothermie bei der geologischen Prospektion [Application of geothermy in geological prospecting]: Freiberger Forschungshefte C 238, p. 45-53, illus., 1968.

Krěmář, Bretislav. See *Cermak, Vladimir. 274-278*

Kremp, Gerhard O. See *Engel, Albert E. J. 264-002*

Kremszner, Miklos. See *Karas, Gyula. 266-244*

272-241 **Krešl, M.** Warmeleitfahigkeit der Gesteine, Messgerät und Bestimmungsmethoden [Heat conductivity of rocks, measuring apparatus and methods of determination]: Freiberger Forschungshefte C 238, p. 95-100, illus., 1968.

Krešl, Milan. See *Cermak, Vladimir. 270-228*

Krešl, Milan. See *Cermak, Vladimir. 272-228*

Kreuzer, H. See *Harre, W. 273-038*

274-224 **Krey, T.** Cooperation in exploration geophysics: Geophys. Prosp. [Netherlands], v. 16, no. 3, p. 305-311, 1968.

Krichevskiy, G. N. See *Sokolov, V. L. 269-341*

Krieg, E. A. See *Froelich, A. J. 270-159*

Krishna Brahman, N. See *Qureshy, M. N. 268-264*

Krishnamurthy, B. V. See *Bauer, S. J. 265-392*

271-063 **Krishnan, M. S.** The Koyna earthquake: Indian Geophys. Union Jour., v. 5, no. 1, p. 9-10, 1968.

Krishnan, R. S. See *Venkatasubramanian, V. S. 275-008*

265-433 **Kristjansson, Leo.** The paleomagnetism and geology of north-western Iceland: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 448-450, 1968.

269-392 **Kristoferson, Lars.** Laboratory simulation experiment on solar wind interaction with the Moon: Jour. Geophys. Research, v. 74, no. 3, p. 906-908, illus., table, 1969.

Krivonosenko, N. I. See *Karasev, A. P. 264-184*

Krivonosenko, N. I. See *Karasev, A. P. 270-149*

271-103 **Krivoshey, M. I.** Laboratornoye opredeleniye granits i urovnya zatopleniya berega v rayone g. Ust'-Kamchatska pri nakatyvanii voln tsunami [Laboratory determination of the limit and level of inundation of the coast in the region of Ust'-Kamchatka in case tsunami waves should roll in], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 184-197, illus., table, 1968.

272-487 **Krivoy, Harold L.; Mears, Connally E.** Seismic events originating at the Atomic Energy Commission's Nevada Test Site, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B117-B121, illus., tables, 1969.

266-264 **Krog, H.** Late-glacial and postglacial shoreline displacement in Denmark [with German abs.], *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 421-435, illus., 1968.

269-001 **Krogh, T. E.; Hurley, P. M.** Strontium isotope variation and whole-rock isochron studies, Grenville province of Ontario: Jour. Geophys. Research, v. 73, no. 22, p. 7107-7125, illus., tables, 1968.

Krogstad, R. S. See *Vali, V. 266-257*

270-137 **Krolikowski, Czesław.** Bemerkungen zur Miniatur-Geoelektrik [Remarks on miniature geoelectrics]: Zeitschr. Angew. Geologie, v. 14, no. 9, p. 498-499, illus., tables, 1968.

272-367 **Kropáček, Vladimír; Miroslav.** Magnetism and ferromagnetism of natural minerals of the spinel group: Československá Akad. Věd Studía Geophys. et Geod., v. 12, no. 4, p. 385-397, illus., tables, 1968.

267-419 **Kropachev, E. P.; Pochtarev, V. I.** Refinement by the iteration method of the coefficients of spherical analysis g^m_n and h^m_n from the T chart of 1965: Geomagnetism and Aeronomy, v. 8, no. 1, p. 160, 1968.

269-471 **Kropotkin, P. N.; Gafarov, R. A.; Valyayev, B. M.; Trapeznikov, Yu. M.** Sootnosheniye poverkhnostnoy i glubinnoy struktury i nekotoryye problemy neftenosnosti Russkoy i Sibirskoy platform [Relationship of surface and deep structures and some problems of the oil possibilities of the Russian and Siberian platforms (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 186-191, illus., 1968.

274-247 **Kropotkin, P. N.** Problema dreyfa materikov (mobilizma) [The problem of continental drift (mobilism)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 3-18, illus., 1969.

275-025 **Kropotkin, P. N.** Absolyutnyy vozrast nekotorykh granitov Korei [Absolute age of some granites from Korea]: Akad. Nauk SSSR Izv. Ser. Geol., no. 6, p. 115-117, table, 1969.

274-303 **Kropotova, O. I.** Die Isotopenzusammensetzung des Kohlenstoffs in Kalziten von Karbonatitmassiven und das Problem der Genese der Karbonatite [The isotopic composition of the carbon in calcites from carbonatite massifs and the problem of the genesis of carbonatites]: Zeitschr. Angew. Geologie, v. 15, no. 3, p. 135-140, illus., tables, 1969.

Krotikov, V. D. See *Alekseyev, V. A. 269-155*

267-184 **Krotman, L. S.** Provodyashchaya sfera v bezgranichnoy neprovodyashchey srede pri impul'sno-periodicheskom vozbuzhdenii odnorodnym magnitnym polem [A conducting sphere in an infinite nonconducting medium in the case of periodic-pulse disturbance by a uniform magnetic field]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 9, p. 130-136, illus., 1968.

Krotman, L. S. See *Ivanov, V. M. 270-146*

Krouse, H. Roy. See *Lewis, John S. 272-052*

264-397 **Krs, Miroslav.** Accuracy limits of palaeomagnetic chronology [with German abs.]: Mineralium Deposita, v. 3, no. 2, p. 155-161, illus., 1968.

264-398 **Krs, Miroslav; Pešek, Jiří; Skárová, Milada.** Beitrag zum Paläomagnetismus und zur Paläogeographie des oberen Karbons im Mittelböhmischen Steinkohlenbecken [Contribution to the paleomagnetism and paleogeography of the Upper Carboniferous Bohemian coal basins (with English summ.)]: Carolinae Univ. Acta Geologica, no. 3, p. 271-289, illus., tables, 1967.

265-441 **Krs, Miroslav.** Geomagnetic field intensity during the Plio-Pleistocene derived from the thermo-remanence of porcellanites and palaeo-slags (Czechoslovakia): Pure and Appl. Geophysics, v. 69, p. 158-167, illus., tables, 1968.

268-410 **Krs, Miroslav.** Rheological aspects of palaeomagnetism?, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 87-96, illus., tables, 1968.

272-365 **Krs, Miroslav.** On the origin of dispersion of the upper-Paleozoic virtual pole positions [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 337-353, illus., tables, 1968.

Krs, Miroslav. See *Kropacek, Vladimir. 272-367*

272-369 **Krs, Miroslav; Tásler, R.** Paläomagnetismus der Oberkarbongesteine im Innersudetischen Becken (Nordböhmen) [Paleomagnetism of the Upper Carboniferous rocks in the inner Sudetic Basin (northern Bohemia)]: Geophysik u. Geologie, no. 12, p. 37-45, illus., tables, 1968.

274-253 **Kruchinin, Yu. A.; Pinter, S.; Simonov, I. M.** Opredeleniye skorosti i napravleniya dvizheniya lednikov v rayone stantsii Novolazarevskoy [Determination of the rate and direction of glacier movement in the vicinity of the Novolazarevskaya station]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 61, p. 26-31, illus., tables, 1967.

274-254 **Kruchinin, Yu. A.; Pinter, S.** Opredeleniye dvizheniya shel'fogo lednika Lazareva (po izmeneniyu koordinat astronomicheskogo punkta) [Determination of the movement of the Lazarev shelf ice (from variation of the coordinates of the astronomical point)]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 61, p. 32-37, illus., tables, 1967.

Krüger, P. See *Rosler, Hans J. 273-327*

Kruglyakov, A. A. See *Yanovskiy, B. M. 271-350*

Kruglyakov, V. V. See *Kondrasheva, N. V. 265-275*

270-151 **Kruglyakov, V. V.** Primeneniye analiza pomekh pri morskoy elektrorazvedka dlya neotektonicheskikh postroyaniy [Use of noise analysis in marine electrical surveying for neotectonic constructions]: Razved. Geofizika, no. 29, p. 80-84, illus., 1968.

267-477 **Kruglyakova, G. I.** Analiz prostranstvennogo raspredeleniya geomagnitnogo polya vostoka Russkoy platformy i sopredel'nykh oblastey Urala [Analysis of the spatial distribution of the geomagnetic field of the eastern Russian platform and adjacent regions of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 134-138, illus., 1968.

267-162 **Krulc, Z.** Einiges über die geoelektrischen Unterrsuchungen in der Blitzschutztechnik in Kroatien (Jugoslawien) [On geoelectric research in lightning protection technique in Croatia (Yugoslavia) (with English and Italian abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 158-163, illus., 1968.

266-552 **Krushensky, R. D.; Escalante, G.** Activity of Irazú and Poás volcanoes, Costa Rica, November 1964-July 1965: Bull. Volcanol., v. 31, p. 75-84, illus., 1968.

271-398 **Krutikhovskaya, Z. A.; Pashkevich, I. K.** Karta anomal'noho mahnītnoho polya Ukrayins'koyi RSR [Map of the anomalous magnetic field of the Ukrainian S.S.R. (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 10, p. 920-922, illus., 1968.

267-423 **Krutikova, T. I.; Fatkullin, M. N.** Effects observed in the F_2-layer of the ionosphere following an SSC magnetic storm: Geomagnetism and Aeronomy, v. 8, no. 2, p. 276-278, illus., 1968.

72-033 **Krylov, A. Ya.; Lisitsyna, N. A.; Silin, Yu. I.; Tsobun, Ya. M.** Argon-kaliyevoye otnosheniye v porodakh kor vyvetrivaniya [Argon-potassium ratio in rocks of weathered crusts]: Akad. Nauk SSSR Doklady, v. 182, no. 4, p. 926-929, tables, 1968.

275-027 **Krylov, A. Ya.; Silin, Yu. I.** Primeneniye argonovogo metoda opredeleniy
vozrasta v morskoy geologii i paleogeografii [Use of the argon method of age deter
mination in marine geology and paleogeography], *in* Khimiya Zemnoy Kory—Geok
himicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniy
akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Geok
himii i Analit. Khimii, p. 390-400, illus., tables, 1963.

Krylov, N. A. See *Mirchink, M. F. 265-468*

264-506 **Krylov, S. V.** Prostranstvennyye sistemy tochechnykh seysmicheskikh nablyu
deniya [Spatial system of spot seismic soundings]: Akad. Nauk SSSR Sibirskoye Ot
deleniye, Geologiya i Geofizika, no. 2, p. 78-85, illus., 1968.

266-399 **Krylov, S. V.** O prirode seysmicheskikh razdelov zemnoy kory [On the nature o
the seismic boundaries in the Earth's crust], *in* Regional'nyye geofizicheskiye iss
ledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst
Geologii i Geofiziki, p. 105-122, illus., 1967.

269-633 **Krylov, S. V.; Mushen'kin, B. P.; Pavlenkov, A. I.; Pyzyrev, N. N.; Rudnitskiy, A**
L. Glubinnyye seysmicheskiye issledovaniya zemnoy kory Zapadnoy Sibiri [Dee
seismic investigations of the Earth's crust in West Siberia (with English summ.)],
Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob.
Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka,"
147-153, illus., 1968.

269-658 **Krylov, S. V.; Krylova, A. L.; Mishen'kin, B. P.; Mishen'kina, Z. R.; Rudnitskiy**
A. L.; Suvorov, V. D.; Yanushevich, T. A. Glubinnyye seysmicheskiye issledovaniy
na yugo-vostoke Zapadno-Sibirskoy plity i v Altaye-Sayanskoy oblasti [Deep seism
investigations in the southeastern part of the West Siberian plate and in the Alta
Sayan district]: Akad. Nauk SSSR Sibirskoy Otdeleniye, Geologiya i Geofizika, no.
p. 3-12, illus., 1968.

Krylov, S. V. See *Dergachev, A. A. 273-469*

Krylov, V. V. See *Tarasenko, T. V. 275-174*

Krylova, A. L. See *Krylov, S. V. 269-658*

Kryukov, V. D. See *Kind, N. V. 272-038*

Ku, C. C. See *Jones, F. W. 271-124*

273-361 **Kuboki, T.** Ready reckoner for computing geomagnetic coordinates of any st
tions in Japan and its vicinity [in Japanese with English abs.]: Kakioka Magnetic O
servatory Mem., v. 13, no. 1, p. 63-87, illus., tables, 1968.

266-556 **Kubota, S.; Berg, E.** Evidence for magma in the Katmai volcanic range: Bu
Volcanol., v. 31, p. 175-214, illus., tables, 1968.

265-151 **Kubotera, Akira; Kikuchi, Shigetomo.** Seismic observation in Shimbara Penins
la—On the activity of Volcano Unzen: Kyoto Univ. Geophys. Inst. Spec. Contr., n
7, p. 161-168, illus., table, 1967.

265-199 **Kubotera, Akira; Ohta, Yutaka.** On seismic waves generated by small explosio
[Pt.] 2: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 169-179, illus., 1967.

272-159 **Kubotera, Akira; Ohta, Yutaka.** Seismic waves generated by small explosio
with special reference to characteristics of wave group II [in Japanese with Engli
abs.]: Zisin, ser. 2, v. 21, no. 2, p. 97-108, illus., 1968.

Kubotera, Akira. See *Ohta, Yutaka. 272-160*

275-235 **Kubotera, Akira; Sumitomo, Norihiko; Doi, Hikaru; Tajima, Hirokazu; Izutuya, Sadakatu.** On the gravity survey over the Kumu volcanic region and Kuju caldera [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 3, p. 131-140, 1968.

272-220 **Kučera, Karel.** K voprosy o vychislenii pervogo gravimetricheskogo popravochnogo chlena v metode Molodenskogo [On the question of calculation of the first gravimetric correction term by the Molodenskiy method (with Czech and German abs.)]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 51-65, illus., tables, 1968.

Kuchapin, A. V. See *Igrevskiy, V. I. 275-179*

Kuchernyuk, V. D. See *Vedekhin, A. F. 272-565*

Kucheruk, Ye. V. See *Dolitskiy, V. A. 267-633*

271-255 **Kudelya, V. A.** Prohresyvnyy ī rehresyvnyy tektohenez [Progressive and regressive tectogenesis (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 1, p. 19-22, illus., 1968.

Kudryavtsev, Yu. I. See *Meyer, V. A. 265-686*

Kuiper, G. P. See *Gault, D. E. 268-084*

Kuiper, G. P. See *Gault, D. E. 275-077*

272-566 **Kukharenko, N. K.; Basin, Ya. N.** Opredeleniye poristosti izvestnyakovykh plastov po paletkam neytronnogo gamma-karotazha [Determination of the porosity of limestone formations from the master curves of neutron-gamma logging], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 215-226, illus., table, 1968.

Kukhtikova, T. I. See *Savarenskiy, Ye. F. 274-290*

275-196 **Kukkamäki, T. J.** Finnish Geodetic Institute, *in* Geodeettinen Laitos (The Finnish Geodetic Institute), 1918-1968: Suomen Geod. Lait. Jul. (Finnish Geod. Inst. Pubs.), no. 65, p. 3-30, illus., 1969.

Kukushkin, A. I. See *Smirnov, Yu. D. 267-337*

273-205 **Kulakhmetov, N. Kh.** Perspektivy neftegazonosnosti yursko-nizhnemelovykh otlozheniy basseyna r. Taz [Prospects of oil and gas possibilities in the Jurassic-Lower Cretaceous formations of the Taz River basin]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 308, illus., tables, 1968.

Kulakov, N. V. See *Kolesnik, A. P. 269-277*

265-114 **Kulhánek, Ota.** Seismic noise discrete filtering: Pure and Appl. Geophysics, v. 69, p. 5-11, illus., 1968.

Kulhánek, Ota. See *Klima, Karel. 267-144*

272-497 **Kulhánek, Ota.** Seismic noise filtering using digital computers (with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 255-286, illus., tables, 1968.

Kulichenko, L. N. See *Yezhov, V. S. 264-579*

Kulichenko, L. N. See *Varyushchenko, S. B. 267-568*

Kulik, V. V. See *Kozachok, I. A. 271-575*

Kulikov, A. A. See *Suvorov, A. A. 270-410*

275-169 **Kulikov, P. K.** Fundament Priural'skoy okrainy Zapadno-Sibirskogo basseyn [The basement of the Ural margin of the West Siberian basin]: Sovetskay Geologiya, no. 2, p. 40-47, illus., 1969.

Kulikov, V. I. See *Akhmedov, G. A. 269-275*

264-591 **Kulinkovich, A. Ye.** O vliyanii anizotropii gornykh porod na rezul'taty karotazh soprotivleniy [On the effect of anisotropy of rocks on the results of resistivit logging]: Ukrain. Nauchno-Issled. Geol.-Razved. Inst. Trudy, no. 13, p. 45-68, illus. 1965.

264-592 **Kulinkovich, A. Ye.** Yavleniya ekvivalentnosti pri elektricheskom karotazh [Equivalence phenomena in electrical logging]: Ukrain. Nauchno-Issled. Geol. Razved. Inst. Trudy, no. 13, p. 69-126, illus., tables, 1965.

268-644 **Kulinkovich, A. Ye.; Lapchenko, S. Yu.; Ostapchuk, O. S.; Khazankina, S. P. Khankin, A. L.** Realizatsiya algoritmov mashinoy interpretatsii karotazhnykh dia gramm na ETsVM [Realization of algorithms for machine interpretation of loggin diagrams on a digital computer], *in* Avtomaticheskaya obrabotka i preobrazovaniy geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 128-146, illus., tables, 1967.

268-646 **Kulinkovich, A. Ye.** Ob osnovnykh skhemakh obrabotki promyslov geofizicheskikh i smezhnykh geologicheskikh dannykh i vozmostnostyakh ik realizatsii na ETsVM [On the basic schemes for processing geophysical logging an affinitive geologic data and possibilities of their realization on a digital computer], Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 85-122, illus., table 1967.

268-589 **Kuliyev, A. K.; Shamsiyev, A. A.; Nazarov, P. G.; Imanov, A. A.; Suleymanov, Kh.** Mekhanicheskiye svoystva porod mezozoyskikh otlozheniy pri vdavlivanii usloviyakh davleniy do 2000 atm [Mechanical properties of rocks of the Mesozo formations upon crushing under conditions of pressures up to 2,000 atm]: Aka Nauk Azerbaydzhan. SSR Izv. Ser. Nauk o Zemle, no. 3, p. 71-75, illus., tables, 196

272-178 **Kul'ko, V. F.; Mikhaylovskiy, V. N.** Elektromagnitnoye pole v sloisty provodyashchikh sredakh [Electromagnetic field in layered conducting mediu (with English summ.)]: Kiev, Akad. Nauk Ukrain. SSR Fiz.-Mekh. Inst. (Izdatel'st "Nauka Dumka"), 148 p., illus., tables, 1967.

274-192 **Kul'ko, V. F.; Mikhaylovskiy, V. N.** Elektromagnitnoye pole pryamolineyno beskonechno dlinnogo kabel'ya s tokom, nakhodyashchegosya v odnom vnutrennykh sloyev mnogosloynoy provodyashchey sredy [Electromagnetic field o rectilinear infinitely long current-carrying cable located in one of the inner layers o multilayered conducting medium], *in* Teoriya i elementy sistem otbo geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 9-19, illus., 1965.

274-193 **Kul'ko, V. F.; Mikhaylovskiy, V. N.** Elektromagnitnoye pole gorizontal'no dipolya, nakhodyashchegosya v odnom iz vnutrennykh sloyev mnogosloyn provodyashchey sredy [Electromagnetic field of a horizontal dipole located in one the inner layers of a multilayered conducting medium], *in* Teoriya i elementy sist otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 20-32, illu 1965.

275-030 **Kulp, D. L.** Skhodimost' i raznoglasiya K-Ar i Rb-Sr metodov opredeleni vozrasta po slyudam [Concordance and discordance of the K-Ar and Rb-Sr metho of determining age on micas], *in* Khimiya Zemnoy Kory—Geokhimicheskaya k ferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vern skogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, 552-566, tables, 1964.

Kulp, J. Laurence. See *Abdel-Monem, Abdalla A. 265-036*

266-043 **Kulp, J. Laurence.** Concordance and discordance between K-A and Rb-Sr isotopic ages from micas, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 592-606, table, 1967; originally published *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

Kulp, J. Laurence. See *Clark, George S. 268-004*

Kumano, Tetsuya. See *Fujinaga, Yasuhiko. 269-627*

Kumazawa, Mineo. See *Kasahara, Junzo. 272-161*

Kumazawa, Mineo. See *Kasahara, Junzo. 272-162*

Kumazawa, Mineo. See *Kasahara, Junzo. 272-163*

Kume, S. See *Shimada, M. 269-433*

273-317 **Kume, S.; Ueda, S.; Koizimi, M.** Synthesis and phase change of germanate albite under pressures: Jour. Geophys. Research, v. 74, no. 8, p. 2145-2147, table, 1969.

Kunin, N. Ya. See *Yesenov, Sh. Ye. 269-272*

269-276 **Kunin, N. Ya.** Metodika izucheniya stroyeniya i sostava fundamenta zakrytykh territoriy kompleksom geofizicheskikh metodov (na primere Yuzhnogo Kazakhstana) [A procedure for studying the structure and composition of the basement of covered territories by a complex of geophysical methods (exemplified by South Kazakhstan) (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 154-160, 1968.

Kunin, N. Ya. See *Mirchink, M. F. 275-372*

275-377 **Kunin, N. Ya.; Sapozhnikov, R. B.** Tektonika i perspektivy neftegazonosnosti paleozoyskikh otlozheniy zony Yuzhno-Embenskogo gravitatsionnogo maksimuma po rezul'tatam regional'nykh geofizicheskikh issledovaniy [Tectonics and oil and gas prospects of the Paleozoic formations of the zone of the South Emba gravity maximum according to the results of regional geophysical investigations]: Geologiya Nefti i Gaza, no. 4, p. 30-35, illus., 1969.

Kuno, H. See *Rikitake, T. 265-357*

Kuno, H. See *Ozima, M. 268-027*

271-190 **Kuno, H.** Origin of andesite and its bearing on the island arc structure: Bull. Volcanol., v. 32, no. 1, p. 141-176, illus., tables, 1968.

265-235 **Kunori, Shoichi; Yokoyama, Hidekichi; Horitsu, Tasaburo.** The measurement of telluric current activity in the frequency range of 0.01 to 10 cp's, [Pt.] 2 [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 6, p. 263-271, illus., 1967.

Kuo, J. See *Nowroozi, A. A. 269-213*

Kuo, J. T. See *Hade, G. 267-135*

271-108 **Kuo, John T.** Areal strain of solid earth tides observed in Ogdensburg, New Jersey: Jour. Geophys. Research, v. 74, no. 6, p. 1635-1644, illus., table, 1969.

274-255 **Kuo, John T.; Ottaviani, Mario; Singh, Shri K.** Variations of vertical gravity gradient in New York City and Alpine, New Jersey: Geophysics, v. 34, no. 2, p. 235-248, illus., tables, 1969.

Kuptsov, V. M. See *Cherdyntsev, V. V. 267-040*

Kuptsov, V. M. See *Cherdyntsev, V. V. 267-370*

269-381 **Kurasawa, Hajime.** Isotopic composition of lead and concentrations of uranium thorium, and lead in volcanic rocks from Dogo of the Oki Islands, Japan: Geochem Jour., v. 2, no. 1, p. 11-28, illus., tables, 1968.

Kurbanov, M. See *Mashrykov, K. K. 264-150*

264-154 **Kurbanov, M.** Izucheniye deformatsii zemnoy kory v predelakh Ashkhabadskoy seysmoaktivnoy zony [Study of deformation of the Earth's crust within the Ashkhabad seismically active zone]: Akad. Nauk Turkmen. SSR Izv. Ser. Fiz.-Tekh. Khim. i Geol. Nauk, no. 1, p. 92-97, illus., 1968.

275-448 **Kurbanov, N. Sh.** Svyaz' elektricheskikh parametrov s koeffitsiyentami poristost i neftegazonasyshchennosti dlya sredne-yurskikh produktivnykh gorizonto mestorozhdeniy Yuzhnogo Mangyshlaka [Correlation of electrical parameters with porosity coefficients and oil- and gas-bearing capability for the middle Jurassi producing horizons of the fields of the Southern Mangyshlak]: Neftegazovaya Geologiya i Geofizika, no. 2, p. 42-44, illus., table, 1969.

Kurbanov, R. K. See *Mustafayev, K. A. 268-647*

Kurbanov, S. Ya. See *Khasanov, A. S. 266-374*

Kurcheryavaya, T. Ye. See *Leont'yev, Ye. I. 275-442*

Kurilenko, F. A. See *Blankov, Ye. B. 272-558*

270-536 **Kurillo, V. N.** Elektromagnitnoye pole peremennogo elektricheskogo dipolya n osi skvazhiny [Electromagnetic field of a variable electrical dipole on the well axis] Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 121-124 1968.

271-087 **Kurita, Tuneto.** Attenuation of short-period P-waves and Q in the mantle: Jou Physics Earth, v. 16, no. 2, p. 61-78, illus., tables, 1968.

Kurita, Tuneto. See *Mikumo, Takeshi. 271-316*

Kurochkina, R. I. See *Antonova, L. V. 267-130*

269-103 **Kuroda, P. K.** Dating methods based on the extinct radionuclides iodine-129 a plutonium-244, *in* Radioactive dating and methods of low-level counting—IAE ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energ Agency, p. 259-268, illus., tables, 1967.

269-143 **Kuroda, P. K.** Plutonium-244 in the early solar system [with discussion by J. Reynolds]: Nature, v. 221, no. 5182, p. 726-729, illus., tables, 1969.

Kuroda, P. K. See *Reynolds, M. A. 274-029*

Kurskeyev, A. K. See *Antonenko, A. N. 268-569*

264-567 **Kurtev, T. I.** Kolichestvennaya interpretatsiya rezul'tatov radiometricheski issledovaniy glinistykh peschanikov [Quantitative interpretation of results radiometric investigations of shaly sandstones]: Razved. Geofizika, no. 23, p. 89-9 illus., 1967.

Kushenkov, A. F. See *Kadukhin, G. F. 265-422*

266-376 **Kushiro, Ikuo; Syono, Yasuhiko; Akimoto, Syun-ichi.** Melting of a peridot nodule at high pressures and high water pressures: Jour. Geophys. Research, v. 7 no. 18, p. 6023-6029, illus., tables, 1968.

Kushnirov, I. V. See *Akramodzhayev, A. M. 275-392*

Kusov, T. R. See *Dorman, M. I. 275-389*

Kusumgar, Sheela. See *Agrawal, D. P. 271-016*

272-237 **Kutarov, I. M.** Die Bestimmung der Zeit zur Errichtung des Temperaturgleichgewichtes und des geothermischen Gradienten in Tiefbohrungen [The determination of the time for reaching temperature equilibrium and the geothermal gradient in deep boreholes]: Freiberger Forschungshefte C 238, p. 55-61, illus., 1968.

Kutas, R. I. See *Gordiyenko, V. V. 266-370*

266-371 **Kutas, R. I.** Osobennosti geotermicheskogo rezhima Sovetskikh Karpat [Features of the geothermal regime of the Soviet Carpathians (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 3-17, illus., tables, 1967.

270-236 **Kutas, R. I.** O svyazi teplovogo potoka s glubinnymi protsessami [On the relationship of heat flow to deep processes (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 25-30, illus., 1968.

Kutas, R. I. See *Gordiyenko, V. V. 271-304*

271-092 **Kutas, V. V.** Spektry pozdovzhnīkh ta poperechnykh khvyl' Seredzemnomors'kykh zemletrusīv [Spectrums of longitudinal and transverse waves from Mediterranean earthquakes (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 10, p. 923-926, illus., table, 1968.

Kutovaya, D. V. See *Safarov, I. P. 264-596*

Kutyabin, E. P. See *Gorokhov, I. M. 265-071*

Kuvayev, O. M. See *Kirillov, V. A. 268-185*

Kuvshinov, G. V. See *Yesenov, Sh. Ye. 269-272*

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Kuzin, I. P. See *Fedotov, S. A. 264-139*

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Kuz'menkova, G. Ye. See *Pavlova, N. N. 268-598*

Kuz'mina, Ye. A. See *Cherdyntsev, V. V. 267-040*

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Kuznetsov, A. A. See *Timofeyev, A. N. 267-279*

Kuznetsov, A. A. See *Timofeyev, A. N. 268-273*

Kuznetsov, A. A. See *Aleynikov, A. L. 268-350*

265-600 **Kuznetsov, A. G.** Metod kolichestvennogo opredeleniya malykh kontsentratsii toriya na osnove stsintillyatsionnogo al'fa-impul'snogo i lyuminestsentnogo analizov [A method of quantitative determination of small concentrations of thorium on the basis of alpha-impulse scintillation and luminescence analyses], *in* Materialy o soderzhanii i raspredelenii radioaktivnykh elementov v gornykh porod (no. 2): Vses. Nauchno-Issled. Geol. Inst. Trudy, v. 142, p. 17-25, illus., tables, 1968.

266-493 **Kuznetsov, G. F.; Serbulenko, M. G.; Tveritin, Ye. G.** K voprosu ob interpretatsii magnitnykh anomaliy paletochnymi metodami [On the problem of the interpretation of magnetic anomalies by graticule methods]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 3, p. 106-111, illus., 1968.

266-494 **Kuznetsov, G. F.** Magnitnoye pole zapadnoy chasti Sibirskoy platformy i yego geologicheskoye istol'kovaniye [The magnetic field of the western part of the Siberian platform and its geologic interpretation], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 75-104, illus., 1967.

269-450 **Kuznetsov, G. Ye.** Nekotoryye zakonomernosti v raspredelenii plotnosti i magnitnoy vospriimchivosti porod kristallicheskogo fundamenta tsentral'nykh rayonov Volgo-Kamskogo kraya [Some regularities in the distribution of density and magnetic susceptibility of the rocks of the crystalline basement of the central regions of the Volga-Kama district], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 179-190, illus., table, 1966.

274-024 **Kuznetsov, M. F.; Naumov, V. A.; Tarasevich, S. I.** Novyye dannyye o vozrastnom i prostranstvennom razmeshchenii trappov yugo-vostochnoy okrainy Tungusskoy sineklizy [New data on the temporal and spatial distribution of the traps of the southeastern margin of the Tunguska syneclise]: Akad. Nauk SSSR Doklady, v. 185, no. 5, p. 1115-1118, illus., table, 1969.

Kuznetsov, M. P. See *Bobritskiy, D. P. 270-142*

264-522 **Kuznetsov, V. L.** K voprosu primeneniya ploshchadnykh vzryvov v zonakh malykh skorostey [Problem of the use of areal shooting in zones of low velocity]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 69-74, illus., 1964.

272-502 **Kuznetsov, V. L.; Ocheretina, V. B.** Nekotoryye osobennosti zapisey otrazhennykh voln v Zapadno-Sibirskoy nizmennosti [Some features of the records of reflected waves in the west Siberian lowland]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 93-101, illus., 1968.

273-470 **Kuznetsov, V. L.; Ocheretina, V. B.** Ob uchete vliyaniye poverkhnostnykh neodnorodnostey pri tochechnykh seysmicheskikh zondirovaniyakh otrazhennymi volnami v Zapadno-Sibirskoy nizmennosti [On calculating the effect of surface inhomogeneities in seismic spot sounding by reflected waves in the West Siberian Lowland (with English summ. p. 156)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 108-113, illus., 1968.

267-366 **Kuznetsov, Yu. V.; Simonyak, Z. N.; Lisitsyn, A. P.; Frenklikh, M. S.** Izotopy toriya (Th-230, Th-232) v poverkhnostnom sloye donnykh osadkov iz Indiyskogo okeana [Thorium isotopes (Th-230, Th-232) in the surface layer of bottom sediments from the Indian Ocean (with English summ.)]: Geokhimiya, no. 2, p. 218-227, tables, 1968.

Kuznetsov, Yu. V. See *Starik, I. Ye. 275-354*

Kuznetsova, I. M. See *Arkhangel'skaya, V. M. 275-116*

Kuznetsova, K. I. See *Balakina, L. M. 271-091*

Kuznetsova, O. N. See *Brodov, L. U. 268-547*

Kuznetsova, O. N. See *Puzyrev, N. N. 269-634*

Kuzovkin, S. K. See *Kalashnikov, N. I. 264-183*

274-199 **Kuzovkin, S. K.** O tselesoobraznosti izmereniya fazy v induktivnoy aeroelektrorazvedke [On the expediency of measuring phase in inductive airborne electrical surveying], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev Akad. Nauk Ukrain. SSR, p. 74-79, illus., 1965.

274-201 **Kuzovkin, S. K.** Otsenka dvykh sposobov elektricheskoy kompensatsii pervichnogo signala v aerometode induktsii [Appraisal of two methods of electrica compensation of the primary signal in the airborne induction method], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 84-89, illus., tables, 1965.

265-664 **Lab. Nac. Engenharia Civil.** Proceedings of the first congress of the International Society of Rock Mechanics, Lisbon, 1966, V. 3 [with French and German texts]: Lisbon, Portugal, Lab. Nac. Engenharia Civil, 691 p., illus., tables, 1967.

Labadze, L. V. See *Tskhakaya, A. D. 265-166*

269-035 **Labeyrie, J.; Duplessy, J. C.; Delibrias, G.; Letolle, R.** Étude des temperatures des climats anciens par la mesure de l'oxygene-18, du carbone-13 et du carbone-14 dans les concretions des cavernes [The study of temperatures of ancient climates by measurement of O-18, C-13, and C-14 in concretions of caverns (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 153-160, illus., 1968.

269-042 **Labeyrie, J.; Lalou, C.; Delibrias, G.** Étude des transgressions marines sur un atoll du Pacifique par les methodes du carbone-14 et du rapport uranium-234/thorium-230 [Study of marine transgressions on a Pacific atoll by means of C-14 and the uranium-234/Thorium-230 ratio (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 349-358, illus., tables, 1967.

Labeyrie, J. See *Leger, C. 269-106*

272-520 **Labeyrie, Jacques; Delibrias, Georgette; Guillier, Marie-Thérèse.** Vitesse moyenne de sédimentation depuis la fin du Würm dans la plaine abyssale de la Méditerranee occidentale [Average rate of sedimentation since the end of the Würm in the abyssal plain of the western Mediterranean]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 25, p. 1370-1372, illus., tables, 1968.

275-363 **Laborde, Ch.** La sonde sismique ancrable S.N.P.A.—Essai d'application a l'etude du signal sismique [S.N.P.A. seismic sonde with an anchor—Attempt at application to the study of the seismic signal (with English abs.)]: Centre Recherches Pau Bull., v. 2, no. 2, p. 411-436, illus., 1968.

Lachance, G. R. See *Wanless, R. K. 267-019*

Lachance, Thomas P. See *McMaster, Robert L. 269-608*

270-065 **LaChapelle, Edward R.** The character of snow avalanching induced by the Alaska earthquake, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 355-361, illus., table, 1968.

Lachenbruch, Arthur H. See *Sass, J. H. 264-280*

266-359 **Lachenbruch, Arthur H.; Marshall, B. Vaughn.** Heat flow and water temperature fluctuations in the Denmark Strait: Jour. Geophys. Research, v. 73, no. 18, p. 5829-5842, illus., table, 1968.

266-361 **Lachenbruch, Arthur H.** Rapid estimation of the topographic disturbance to superficial thermal gradients: Rev. Geophysics, v. 6, no. 3, p. 365-400, illus., tables, 1968.

267-286 **Lachenbruch, Arthur H.** Preliminary geothermal model of the Sierra Nevada: Jour. Geophys. Research, v. 73, no. 22, p. 6977-6989, illus., table, 1968.

275-253 **Lachenbruch, Arthur H.** The effect of two-dimensional topography on superficial thermal gradients: U.S. Geol. Survey Bull. 1203-E, p. E1-E86, illus., tables, 1969.

Lacombe, Pierre. See *Lasserre, Marc. 275-015*

271-497 **Lacoss, R. T.; Kelly, E. J.; Toksöz, M. N.** Estimation of seismic noise structure using arrays: Geophysics, v. 34, no. 1, p. 21-36, illus., table, 1969.

Lacoss, R. T. See *Capon, J. 275-087*

275-247 **Ladynin, A. V.** Izostaziya i sovremennaya tektonicheskaya aktivnost' Pribaykal'ya i Zabaykal'ya [Isostasy and recent tectonic activity in Baikalia and Transbaikalia (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 95-104, illus., table, 1969.

LaFehr, T. R. See *Nettleton, L. L. 275-224*

268-031 **Lafleur, L. D.; Goodman, C. D.; King, E. A.** Mössbauer investigation of shocked and unshocked iron meteorites and fayalite: Science, v. 162, no. 3859, p. 1268-1270, illus., tables, 1968.

Lagaay, R. A. See *Collette, B. J. 265-335*

273-258 **Lagaay, R. A.** Geophysical investigations of the Netherlands Leeward Antilles: Koninkl. Nederlandse Akad. Wetensch. Verh., Afd. Natuurk., ser. 1, v. 25, no. 2, 86 p., illus., tables, 1969.

272-130 **Lagus, Peter L.; Anderson, Don L.** Tidal dissipation in the Earth and planets: Physics Earth and Planetary Interiors, v. 1, no. 7, p. 505-510, illus., tables, 1968.

Lagutinskaya, L. P. See *Faynberg, E. B. 273-185*

Lagutochkina, K. D. See *Golinskiy, G. L. 264-132*

Lagutochkina, K. D. See *Golinskiy, G. L. 265-168*

Laherrere, J. See *Canaple, J. 269-258*

Lain, A. Yu. See *Grinenko, V. M. 269-385*

268-377 **Laird, M. J.** Structure of the neutral sheet in the geomagnetic tail: Jour. Geophys. Research, v. 74, no. 1, p. 133-139, illus., table, 1969.

Lajoie, K. R. See *Gilbert, C. M. 271-182*

273-243 **Lajtai, E. Z.** Brittle fracture in direct shear and the development of second order faults and tension gashes, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 96-112, illus., 1969.

275-405 **Lajtai, E. Z.** Strength of discontinuous rocks in direct shear [with French abs.]: Geotechnique, v. 19, no. 2, p. 218-233, illus., 1969.

267-307 **Lakhtionov, M. O.; Lyubimova, Ye. A.; Tarkhov, A. G.** Podzemnaya termorazvedka na rudnykh mestorozhdeniyakh [Underground thermal surveying on ore deposits]: Razvedka i Okhrana Nedr, no. 9, p. 27-32, illus., 1968.

269-093 **Lal, D.; Muralli, A. V.; Rajan, R. S.; Tamhane, A. S.; Lorin, J. C.; Pellas, P.** Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 111-119, illus., table, 1968.

Lalou, C. See *Labeyrie, J. 269-042*

Lalou, Claude. See *Duplessy, Claude. 275-278*

264-226 **Lamakhin, V. V.** Proiskhozhdeniye Baykal'skoy vpadiny [Origin of the Baikal depression]: Priroda, no. 4, p. 48-59, illus., 1968.

270-197 **Lamakin, V. V.** Neotektonika Baykal'skoy vpadiny [Neotectonics of the Baikal basin]: Akad. Nauk SSSR Geol. Inst. Trudy, no. 187, 248 p., illus., tables, 1968.

271-226 **Lamakin, V. V.** O gorizontal'nyk sostavlyayushchikh neotektoniki Baykal'skoy vpadiny [On the horizontal components of the neotectonics of the Baikal basin], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 26-35, illus., table, 1968.

Lambert, Gérard. See *Cuong, Nguyen Ba. 265-595*

266-384 **Lambert, I. B.; Wyllie, P. J.** Stability of hornblende and a model for the low velocity zone: Nature, v. 219, no. 5160, p. 1240-1241, illus., 1968.

271-499 **Lambert, I. B.; Heier, K. S.** Estimates of the crustal abundances of thorium, uranium, and potassium: Chem. Geology, v. 3, no. 4, p. 233-238, illus., table, 1968.

Lambert, Paul Wayne. See *Elston, Wolfgang E. 273-072*

272-079 **Lambiotte, J. J.; Taylor, G. R.** A photometric technique for deriving slopes from lunar orbiter photography, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 205-224, illus., 1968.

LaMori, P. N. See *Brace, W. F. 273-316*

Landisman, M. See *Dziewonski, A. 272-103*

274-113 **Landisman, M.; Dziewonski, A.; Sato, Y.** Recent improvements in the analysis of surface wave observations: Royal Astron. Soc. Geophys. Jour., v. 17, no. 4, p. 369-403, illus., 1969.

Landisman, M. See *Mitchell, B. J. 275-360*

Landisman, Mark. See *Usami, Tatsuo. 271-312*

268-197 **Landsberg, Helmut E.** Unfinished geophysical business: Am. Geophys. Union Trans., v. 49, no. 4, p. 607, 1968.

264-140 **Landyreva, N. S.** Sil'nyye zemletryaseniya mira v 1964 g. [Strong earthquakes of the world in 1964], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 185-191, illus., table, 1967.

265-177 **Landyreva, N. S.** Sil'nyye zemletryaseniya mira v 1965 g. [Strong earthquakes of the world in 1965], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 181-187, illus., tables, 1967.

275-396 **Lane, K. S.** Pore pressure effects on Berea Sandstone subjected to experimental deformation—Discussion [of paper by M. J. Aldrich, 1969]: Geol. Soc. America Bull., v. 80, no. 8, p. 1587-1590, illus., 1969.

Langan, Lee V. See *Slack, Howard A. 265-454*

Langel, R. A. See *Cain, J. C. 264-372*

267-415 **Langel, R. A.; Cain, J. C.** OGO-2 magnetic field observations during the magnetic storm of March 13-15, 1966 [with French abs.]: Annales Géophysique, v. 24, no. 3, p. 857-869, illus., 1968.

Langford-Smith, T. See *Dury, G. H. 274-018*

Lanphere, M. A. See *Moore, W. J. 267-003*

Lanphere, M. A. See *Reed, B. L. 268-008*

264-019 **Lanphere, Marvin A.; Irwin, William P.; Hotz, Preston E.** Isotopic age of the Nevadan orogeny and older plutonic and metamorphic events in the Klamath Mountains, California: Geol. Soc. America Bull., v. 79, no. 8, p. 1027-1052, illus., tables, 1968.

264-305 **Lanphere, Marvin A.** Sr-Rb-K isotopic relationships in ultramafic rocks, southeastern Alaska: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 185-190, illus., table, 1968.

Lanphere, Marvin A. See *Wahrhaftig, Clyde. 270-002*

273-030 **Lanphere, Marvin A.** Geochronology of the Yavapai Series of central Arizona, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 757-762, illus., tables, 1968.

267-451 **Lanshchikov, N. T.; Akhmatov, P. G.** Fatsial'noye raschleneniye porod effuzivnogo oblika Chatkalo-Kuraminskogo regiona po magnitnom svoystvam [Facies subdivision of rocks of effusive aspect in the Chatkal-Kuraminsk region on the basis of magnetic properties]: Akad. Nauk SSSR Izv. Ser. Geol., no. 10, p. 43-55, illus., table, 1968.

Lantsman, A. Kh. See *Davidenko, F. K. 264-589*

265-385 **Lanzerotti, L. J.; Brown, W. L.; Roberts, C. S.** Energetic electrons at 6.6 R_E during the January 13-14, 1967, geomagnetic storm: Jour. Geophys. Research, v. 73, no. 17, p. 5751-5760, illus., table, 1968.

267-386 **Lanzerotti, L. J.** Penetration of solar protons and alphas to the geomagnetic equator: Phys. Rev. Letters, v. 21, no. 13, p. 929-933, illus., 1968.

267-414 **Lanzerotti, L. J.** Outer zone electron fluxes during the February 5, 1965, solar proton event [with French abs.]: Annales Geophysique, v. 24, no. 3, p. 847-855, illus., 1968.

273-334 **Lanzerotti, L. J.** Low-energy solar protons and alphas as probes of the interplanetary medium—The May 28, 1967, solar event: Jour. Geophys. Research, v. 74, no. 11, p. 2851-2868, illus., table, 1969.

Lapchenko, S. Yu. See *Kulinkovich, A. Ye. 268-644*

Lapin, S. I. See *Byakov, Yu. A. 265-651*

264-410 **Lapin, S. S.** O mekhanizme obratnoy namagnichennosti gornykh porod bez inverziy magnitnogo polya Zemli (stat'ya pervaya) [On a mechanism of inverse magnetization of rocks without reversal of the magnetic field of the Earth (first paper)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 86-93, illus., table, 1968.

269-445 **Lapin, S. S.** O prichinakh obratnoy namagnichennosti gornykh porod bez inverzii magnitnykh polyusov Zemli [On the causes of reversed magnetization of rocks without inversion of the Earth's magnetic fields (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 68-73, illus., table, 1968.

269-449 **Lapin, S. S.** Vliyaniye magnitnoy vospriimchivosti okryzhayushchey sredy na znak polyarnosti pri namagnichivanii formiruyushchikhsya porod (stat'ya vtoraya) [Effect of magnetic susceptibility of the surrounding medium on the sign of the polarity in the magnetization of rocks as they form (second paper)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 4, p. 13-22, illus., tables, 1968.

Lapinskaya, T. A. See *Nevolin, N. V. 269-271*

Laptev, V. V. See *Tslav, L. Z. 272-567*

Lapwood, E. R. See *Sato, R. 269-231*

265-079 **Larimer, John W.** An experimental investigation of oldhamite, CaS, and the petrologic significance of oldhamite in meteorites: Geochim. et Cosmochim. Acta, v. 32, no. 9, p. 965-982, illus., tables, 1968.

268-034 **Larimer, John W.** Experimental studies on the system Fe-MgO-SiO$_2$-O$_2$ and their bearing on the petrology of chondritic meteorites: Geochim. et Cosmochim. Acta, v. 32, no. 11, p. 1187-1207, illus., tables, 1968.

273-495 **Larina, N. I.** Paschet ploshchadey Tikhogo Okeana, ego morey i ryada kotlovii [Computation of areas of the Pacific Ocean, its seas and some basins (with English abs.)]: Okeanologiya, v. 8, no. 4, p. 646-658, illus., tables, 1968; English translation, Oceanology, v. 8, no. 4, p. 518-529, 1969.

Larina, V. A. See *Vikhirev, B. V. 264-196*

273-376 **Larochelle, A.** L'application de la statistique au paleomagnetisme [with English abs.]: Canada Geol. Survey Paper 68-59, 19 p., illus., tables, 1968.

273-377 **Larochelle, A.; Pearce, G. W.** A possible source of error in determining the remanent magnetization of cylindrical rock specimens with a biastatic magnetometer: Canada Geol. Survey Paper 68-62, 13 p., illus., 1969.

274-355 **Larochelle, A.** Paleomagnetism of the Monteregion Hills—Further results: Jour. Geophys. Research, v. 74, no. 10, p. 2570-2575, illus., tables, 1969.

266-427 **Larsen, J. C.** Electric and magnetic fields induced by deep sea tides: Royal Astron. Soc. Geophys. Jour., v. 16, no. 1, p. 47-70, illus., tables, 1968.

273-022 **Larsen, Ole; Möller, Jörgen.** Potassium-argon age studies in West Greenland, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 683-691, illus., tables, 1968.

Larson, D. B. See *Cherry, J. T. 266-542*

273-379 **Larson, E.; Ozima, Mituko; Ozima, Minoru; Nagata, T.; Strangway, D.** Stability of remanent magnetization of igneous rocks: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 263-292, illus., table, 1969.

Larson, E. E. See *Strangway, D. W. 266-451*

266-454 **Larson, E. E.; Strangway, D. W.** Discussion [of] "Correlation of petrology and natural magnetic polarity in Columbia Plateau basalts" by R. L. Wilson and N. D. Watkins [1967]: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 437-441, illus., 1968.

Larson, E. E. See *Strangway, David W. 267-435*

271-361 **Larson, E. E.; Strangway, D. W.** Magnetization of the Spanish Peaks dike swarm, Colorado, and Shiprock dike, New Mexico: Jour. Geophys. Research, v. 74, no. 6, p. 1505-1514, illus., tables, 1969.

Larson, K. B. See *Shoemaker, E. M. 275-071*

264-210 **Larson, Roger L.; Menard, H. W.; Smith, S. M.** Gulf of California—A result of ocean-floor spreading and transform faulting: Science, v. 161, no. 3843, p. 781-784, illus., 1968.

268-430 **Larson, Roger L.; Spiess, Fred N.** East Pacific Rise crest—A near-bottom geophysical profile: Science, v. 163, no. 3862, p. 68-71, illus., 1969.

LaSalle, Pierre. See *Sauve, Pierre. 271-026*

Lasserre, Marc. See *Blanc, Yves. 269-019*

269-022 **Lasserre, Marc.** Données géochronologiques nouvelles acquises au 1^{er} Janvier 1967 par la methode au strontium appliquee aux formations cristallines et cristallophylliennes du Cameroun [New geochronologic data acquired to January 1, 1967 by the strontium method applied to crystalline formations and phyllites of the Cameroons], *in* Études géochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Géologie et Minéralogie, no. 36, pt. 16, p. 109-144, tables, 1967.

275-015 **Lasserre, Marc; Lacombe, Pierre; Saurin, Edmond.** Étude pétrographique, chimique et géochronologique du granite de Bo Khâm (Cambodge oriental) [Petrographic, chemical and geochronologic study of the Bo Khâm granite (eastern Cambodia)]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 25, p. 2073-2076, illus., tables, 1968.

275-054 **Latham, G.; Ewing, Maurice; Press, Frank; Sutton, G.** The Apollo Passive Seismic Experiment: Science, v. 165, no. 3890, p. 241-250, illus., 1969.

Latham, Gary V. See *Anderson, Rockne S. 274-076*

Latham, Gary V. See *Nakamura, Yosio. 275-050*

265-474 **Latikaynen, V. I.** Obzor zarubezhnoy magnitorazvedochnoy apparatury [Review of foreign magnetic survey apparatus]: Geofiz. Apparatura, no. 32, p. 21-43, tables, 1967.

271-553 **Latter, J. H.** Active volcanoes and fumarole fields of the world on punched cards (with their eruptions since January 1963): Bull. Volcanol., v. 32, no. 1, p. 299-300, 1968.

Lattimore, Robert. See *Peter, George. 269-451*

265-311 **Lattimore, Robert K.; Bush, Sam A.; Bush, Patricia A.** Transcontinental geophysical survey (35°-39° N)—Gravity and bathymetric map from the coast of California to 133° W longitude: U.S. Geol. Survey Misc. Geol. Inv. Map I-531-B, scale 1:1,000,000, 1968.

265-455 **Lattimore, Robert K.; Bassinger, B. G.; DeWald, Omar.** Transcontinental geophysical survey (35°-39° N)—Magnetic map from the coast of California to 133° W longitude: U.S. Geol. Survey Misc. Geol. Inv. Map I-531-A, scale 1:1,000,000, 1968.

268-259 **Laudon, T. S.** Land gravity survey of the Solomon and Bismarck Islands, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 279-295, illus., 1968.

265-445 **Lauer, J. P.** Permian palaeomagnetism of the Rhinegraben area—A preliminary study, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 16-17 illus., table, 1967.

265-446 **Lauer, J. P.; Roche, A.; Wimmenauer, W.** Structure, evolution and paleomagnetism of the Kaiserstuhl Volcano, *in* The Rhinegraben progress report 1967 [J. P Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 134-138, illus., 1967.

264-032 **Lauerma, Raimo; Piispanen, Risto.** Worm-shaped casts in Precambrian quartzite from Kuusamo, northeastern Finland: Finlande Comm. Geol. Bull., no. 229, p. 189-197, illus., 1967.

Laughlin, A. W. See *Damon, P. E. 269-049*

268-604 **Laughton, A. S.** New evidence of erosion on the deep ocean floor: Deep-Sea Research, v. 15, no. 1, p. 21-29, illus., 1968.

268-126 **Lauletta, E.** Récentes activités italiennes dans le domaine du génie séismique [Recent Italian activities in the domain of seismic engineering], *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 59-61, 1968.

269-331 **Laurén, Lennart.** En djupmodell av rapakivimassivet i SE Finland beräknad ur tyngdkraftsdata [A depth model of the rapakivi granite in southeastern Finland computed from gravity data (with English summ.)]: Geologi, v. 20, no. 6, p. 89-91, illus., 1968.

269-043 **Laurent, R.; Chessex, R.; Delaloye, M.** La méthode géochronometrique du plomb total appliquee a l'Étude géologique des massifs du mont-Blanc et des Aiguilles-Rouges (Alpes Franco-Suisses) [The geochronometric method of total lead applied to the geological study of the massifs of Mont Blanc and the Aiguilles Rouges (the Franco-Swiss Alps (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 371-384, illus., tables, 1967.

268-529 **Lauterbach, Robert.** Metallometrie des Radiums zur Aufsuchung verdeckter tektonischer Bruche [Metallometry of radium for prospecting for covered faults], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 111-119, illus., 1968.

Lavenia, A. See *Fanelli, M. 267-291*

Laverov, N. P. See *Kantsel', A. V. 268-171*

Lavin, Peter M. See *Behrendt, John C. 273-204*

270-178 **Lavrent'yev, M. M.** Matematicheskiye zadachi interpretatsii geofizicheskikh nablyudeniy [Mathematical problems in the interpretation of geophysical observations], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 3-8, 1967.

266-149 **Lavrov, I. M.** Spektral'nyye osobennosti kolebaniy zemlyanogo sooruzheniya pri zemletryasenii [Spectral features of the vibration of an earth construction in earthquakes], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 6-19, illus., table, 1967.

266-150 **Lavrov, I. M.** Zakonomernosti kolebaniy zemlyanogo sooruzheniya pri zemletryasenii [Regularities of vibrations of an earth construction in earthquakes], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 71-84, illus., 1967.

267-066 **Lavrukhina, A. K.; Revina, L. D.; Yukina, L. V.** Skorost' obrazovaniya kosmogennykh izotopov v zheleznykh meteoritakh [Rate of formation of cosmogenic isotopes in iron meteorites (with English summ.)]: Geokhimiya, no. 3, p. 251-264, illus., tables, 1968.

269-109 **Lavrukhina, A. K.; Ustinova, G. K.** K voprosu ob otsenke iskusstvennoy radioaktivnosti v kamennykh meteoritakh [On the problem of the estimation of induced radioactivity in stony meteorites]: Akad. Nauk SSSR Doklady, v. 179, no. 6, p. 1448-1451, illus., 1968.

269-112 **Lavrukhina, A. K.; Ustinova, G. K.** O raspredelenii intensivnosti yaderno-aktivnoy komponenty kosmicheskogo izlucheniya v meteoritakh [On the distribution of intensity of the nuclear-active component of cosmic radiation in meteorites (with English summ.)]: Astron. Zhur., v. 44, no. 5, p. 1081-1086, illus., 1967.

Lawn, Barbara. See *Stuckenrath, Robert, Jr. 271-013*

271-256 **Lazarenko, M. A.; Guterman, V. G.** Pro peremīshchennya rechovyny verkhn'oyi mantīyi [On displacements of matter in the upper mantle (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 4, p. 332-334, illus., 1968.

Lăzărescu, V. See *Visarion, M. 271-291*

Lazarev, I. S. See *Mamchur, G. P. 272-290*

265-176 **Lazareva, A. L.** Zemletryaseniya Arktiki [Earthquakes in the Arctic], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 179-180, illus., tables, 1967.

Lazarus, A. J. See *Siscoe, G. L. 264-321*

Lazarus, A. J. See *Siscoe, G. L. 271-330*

Lazo, E. See *James, D. E. 273-117*

Lazo L., Eduardo. See *James, David E. 275-093*

265-141 **Lazo, Luis Eduardo.** Preliminary study on the nature of San Agustin fault system, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 1-8, illus., tables, 1966.

Lazrus, A. L. See *Cadle, R. D. 274-461*

Lazurkin, D. V. See *Gramberg, I. S. 275-175*

Leake, B. E. See *Moorbath, S. 267-016*

266-002 **Leakey, L. S. B.; Protsch, Reiner; Berger, Rainer.** Age of bed V, Olduvai Gorge, Tanzania: Science, v. 162, no. 3853, p. 559-560, table, 1968.

266-341 **Leaman, D. E.; Naqvi, I. H.** Geology and geophysics of the Cygnet District: Tasmania Geol. Survey Bull., no. 49, 110 p., illus., table, 1967.

267-167 **Leaman, D. E.** Engineering geology: Tasmania Dept. Mines Tech. Repts., no. 11 (1966), p. 66-71, illus., 1968.

Lebed', S. G. See *Vovk, A. A. 271-119*

Lebedev, K. A. See *Brodov, L. U. 268-547*

Lebedev, K. A. See *Puzyrev, N. N. 269-634*

Lebedev, K. A. See *Puzyrev, N. N. 272-501*

266-478 **Lebedev, T. S.; Savenko, B. Ya.; Korniyets, D. V.** Vliyaniye vysokogo gidrostaticheskogo davleniya na magnitnyye svoystva izverzhennykh gornykh porod [Effect of high hydrostatic pressure on the magnetic properties of igneous rocks (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 5-11, illus., tables, 1968.

266-481 **Lebedev, T. S.; Poznanskaya, N. F.** Stokhasticheskiye svyazi nekotorykh fizicheskikh parametrov effuzivnykh porod Zakarpat'ya [Stochastic relationships of some physical parameters of the volcanic rocks of Transcarpathia (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 39-45, illus., table, 1968.

270-175 **Lebedev, T. S.** XIV General'naya assambleya mezhdunarodnogo geodezicheskogo i geofizicheskogo soyuza v Shvetsarii [The 14th General Assembly of the International Union of Geodesy and Geophysics in Switzerland (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 89-95, illus., 1968.

275-194 **Lebedev, T. S.; Balavadze, B. K.; Strakhov, V. N.; Klushin, I. G.; Krasovskiy, S. S.** Prazhskiy simpozium po kompleksnoy interpretatsii geofizicheskikh dannykh [Prague symposium on the collective interpretation of geophysical data (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 78-82, 1969.

Lebedev, V. Ye. See *Rezanov, R. A. 264-574*

Lebedeva, G. N. See *Puzyrev, N. N. 272-501*

Lebedeva, T. M. See *Tskhakaya, A. D. 265-166*

Lebedinets, V. N. See *Ivanova, I. A. 267-065*

269-111 **Lebedinets, V. N.; Portnyagin, Yu. I.** Drobleniye plotnykh meteornykh tel v atmosfere [Fragmentation of dense meteoric bodies in the atmosphere (with English summ.)]: Astron. Zhur., v. 44, no. 4, p. 874-888, illus., tables, 1967.

268-097 **Lebedinskiy, A. I.; Krasnopolskiy, V. A.; Aganina, M. U.** The spectral albedo of the Moon's surface in the mid-ultraviolet according to data from the Zond-3 space probe, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 47-54, illus., 1968.

268-098 **Lebedinskiy, A. I.; Leikin, G. A.; Tulupov, V. I.; Fomichev, A. G.; Khlopov, B. V.; Shvidkovskaya, T. E.; Shuster, G. I.; Glovatsky, D. N.** Infrared spectrophotometry of lunar surface from Zond-3 space probe, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 55-63, illus., 1968.

268-099 **Lebedinskiy, A. I.; Leikin, G. A.** Comparative study of the lunar surface structure at the landing sites of automatic stations, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 64-69, illus., 1968.

264-580 **Lebedkin, L. V.; Vostretsov, R. N.** Skvazhinnoye dipol'noye elektromagnitnoye profilirovaniye [Borehole dipole electromagnetic profiling]: Geofiz. Apparatura, no. 33, p. 111-125, illus., 1967.

268-405 **LeBorgne, E.** The relationship between the magnetic susceptibility and the history of soils, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 666-669, 672-673, tables, 1964.

269-399 **LeBorgne, Eugene; Sibuet, Jean-Claude.** Sur l'orientation du vecteur de Parkinson dans les observatoires situes au Nord-Ouest de l'Afrique et du Sud de l'Espagne [On the orientation of the Parkinson vector in the observatories situated in northwest Africa and southern Spain]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 20, p. 1113-1116, illus., 1968.

274-481 **Lebourg, M.** Engineering of drill stem testing, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. 01-039, illus., 1969.

Leclaire, Lucien. See *Bouysse, Philippe. 270-356*

265-319 **Lecolazet, R.** La carte gravimétrique du fossé Rhénan [Gravimetric map of the Rhine graben], *in* The Rhine graben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 104, illus., 1967.

274-013 **Ledent, D.; Pasteels, P.** Détermination de l'âge des roches post-tectoniques du sud-est du Brésil [Determination of the age of post-tectonic rocks of southeastern Brazil]: Soc. Géol. Belgique Annales, v. 91, pt. 3, p. 305-309, tables, 1968.

Ledent, D. See *Cahen, L. 274-014*

Ledley, B. G. See *Sugiura, M. 267-379*

274-268 **Lee, C. H.; Kim, J. T.; Chang, C. C.; Chang, M. H.; Kim, K. S.** Summarized report on gravity prospecting in Pohang area [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 111-118, illus., tables, 1968.

Lee, Chun Hoon. See *Lee, Dang Hoon. 267-168*

Lee, Chun Hoon. See *Lee, Dang Hoon. 267-169*

267-168 **Lee, Dang Hoon; Lee, Chun Hoon; Seward, F. A., Jr.; Jeong, Ki Chang.** Summarized report of the fourth phase geophysical investigations of the Kuryong prospective area [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 129-142, illus., tables, 1967.

267-169 **Lee, Dang Hoon; Lee, Chun Hoon.** Report of electrical prospecting on the Sockgok mine [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 1, no. 1, p. 227-234, illus., table, 1967.

274-183 **Lee, Dang Hoon; Kim, Chul Min; Han, Dae Rim; Kim, Chang Ki.** The report of electrical exploration on ground water of Cheju Island [in Korean with English abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 65-73, illus., table, 1968.

269-009 **Lee, Donald E.; Stern, T. W.; Mays, R. E.; VanLoenen, R. E.** Accessory zircon from granitoid rocks of the Mount Wheeler mine area, Nevada, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D197-D203, illus., tables, 1968.

Lee, Fitzhugh T. See *Nichols, Thomas C., Jr. 267-597*

Lee, Hun Ki. See *Kim, Chong Su. 267-262*

274-457 **Lee, Joung Hwan; Um, Sang Ho; Kim, Chong Su.** A review on the offshore geology in the continental shelf area of Korea [with Korean abs.]: Korea Geol. Survey Rept. Geophys. Explor., v. 2, no. 1, p. 225-229, illus., 1968.

Lee, Seng-Lip. See *Parmelee, Richard A. 275-124*

264-073 **Lee, W. H. K.** Effects of selective fusion on the thermal history of the Moon, Mars, and Venus: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 277-283, illus., tables, 1968.

264-294 **Lee, W. H. K.** Effects of selective fusion on the thermal history of the Earth's mantle: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 270-276, illus., 1968.

274-111 **Lee, W. H. K.; Raleigh, C. B.** Fault plane solution of the Koyna (India) earthquake: Nature, v. 223, no. 5202, p. 172-173, illus., 1969.

Leech, A. P. See *Condie, Kent C. 272-010*

Leeds, David J. See *Tanaka, Teiki. 271-080*

Lee-Hu, Chin-Nan. See *Bickford, M. E. 271-001*

Leenhardt, O. See *Serruya, C. 275-362*

275-412 **Leenhardt, Olivier.** Bibliography of marine seismics—Inst. Oceanog. Monaco and Natl. Oceanog. Data Center, Spec. Bibliographies on Oceanography, Contr., No. 3: Washington, D. C., Am. Meteorological Soc., 95 p., 1967.

Leger, C. See *Mabuchi, H. 265-078*

269-106 **Leger, C.; Bibron, R.; Labeyrie, J.; Delibrias, G.** Spectrometre a grande sensibilite destine a la mesure du rayonnement de faible energie [A high-sensitivity spectrometer for measuring low-energy X-rays (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 629-638, illus., 1967.

268-324 **Leggo, P. J.; Hutchison, R.** A Rb-Sr isotope study of ultrabasic xenoliths and basaltic host rocks from the Massif Central, France: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 71-75, illus., table, 1968.

271-030 **Legierski, J.; Sattran, V.** Blei-Isotope in Galeniten des Bohmischer Massivs [Lead isotopes in galenas from the Bohemian Massif (with discussion)] Freiberger Forschungshefte, C 209, p. 73-80, illus., 1967.

Legin, V. K. See *Starik, I. Ye. 275-354*

LeGorgen, Jean-Pierre. See *Bouysse, Philippe. 266-511*

Lehmann, H.-R. See *Best, A. 272-328*

274-145 **Lehmann, I.** Travel times and amplitudes of the Salmon nuclear explosion: Seismol. Soc. America Bull., v. 59, no. 2, p. 959-966, illus., tables, 1969.

272-548 **Lehnert, Klaus.** Interpretation von Bohrlochmessungen aus dem Zechstein-Hauptdolomit [Interpretation of borehole measurements from the Zechstein Main Dolomite]: Geophysik u. Geologie, no. 12, p. 83-98, illus., table, 1968.

Lehtinen, S. See *Puranen, M. 268-298*

270-109 **Leighty, R. D.** Remote sensing for engineering investigation of terrain—Radar systems, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 669-685, illus., 1968.

Leikin, G. A. See *Lebedinskiy, A. I. 268-098*

Leikin, G. A. See *Lebedinskiy, A. I. 268-099*

274-104 **Leipold, Louis E.** (editor). The Prince William Sound, Alaska, earthquake of 1964 and aftershocks—V. 3, Research studies and interpretive results, geodesy and photogrammetry: U.S. Coast andGeod. Survey Pub. 10-3, 161 p., illus., tables, 1969.

Leischner, Herbert. See *Oelsner, Christian. 270-231*

266-548 **LeMasurier, Wesley E.; Wade, F. Alton.** Fumarolic activity in Marie Byrd Land, Antarctica: Science, v. 162, no. 3851, p. 352, 1968.

267-621 **LeMasurier, Wesley E.** Volcanic geology of central Marie Byrd Land: Antarctic Jour. U.S., v. 3, no. 4, p. 90-91, 1968.

274-332 **Le-Minh-Triet.** Ob elektricheskom dreyfe v ionosfere vo vremya magnitnykh bur' [On the electrical drift in the ionosphere at the time of magnetic storms (with English summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 145-151, 1967.

274-333 **Le-Minh-Triet.** K voprosu vozniknoveniya magnito-ionosfernykh vozmushcheniy [On the problem of the origin of magnetoionospheric disturbances (with English summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 3-4, p. 379-387, illus., 1967.

265-390 **Lenhart, K. G.** Geomagnetic and solar data for use with digital computers: Am. Geophys. Union Trans., v. 49, no. 2, p. 463-464, 1968.

Lennep, A. P. van. See *Collette, B. J. 265-335*

Lenners, Dietrich. See *Schmidt, Herbert. 274-329*

270-078 **Lensen, G. J.; Suggate, R. P.** Inangahua earthquake—Preliminary account of the geology, *in* Preliminary reports on the Inangahua earthquake, New Zealand, May 1968: New Zealand Dept. Sci. and Indus. Research Bull. 193, p. 17-36, illus., 1968.

Lenz, H. See *Harre, W. 273-038*

264-135 **Leonov, N. N.; Sapov. O. P.; Soboleva, O. V.** Karakul'skoye zemletryaseniye 16 oktyabrya 1963 g. [The Kara Kul' earthquake of October 16, 1963], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 84-91, illus., 1967.

265-171 **Leonov, N. N.; Iodko, V. K.; Nechayev, V. A.; Semenov, P. G.; Golinskiy, G. L.; Soboleva, O. V.** Zemletryaseniye v Severnom Afganistane 14 marta 1965 g. [The earthquakes in northern Afghanistan on March 14, 1965], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 77-86, illus., table, 1967.

Leont'yev, D. N. See *Znamenskiy, V. V. 265-650*

Leont'yev, Ye. I. See *Zalazayeva, L. V. 274-494*

275-442 **Leont'yev, Ye. I.; Kurcheryavaya, T. Ye.** Opredeleniye neftegazonasyshchennosti peschanykh plastov tsentral'noy chasti Zapadno-Sibirskoy nizmennosti po dannym elektrometrii [Determination of the oil and gas saturation of the sandstone formations of the central part of the West Siberian Lowland according to the data of electrometry]: Geologiya Nefti i Gaza, no. 4, p. 50-53, illus., 1969.

Leopold, Estella B. See *Dickinson, Robert G. 267-009*

Leopold, Estella B. See *Wahrhaftig, Clyde. 270-002*

272-379 **LePichon, Xavier.** Comments on a paper by D. H. Matthews and C. A. Williams "Linear magnetic anomalies in the Bay of Biscay—A qualitative interpretation" [1968]: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 251-252, illus., 1968.

Lerbekmo, J. F. See *Shafiqullah, M. 267-029*

Lerbekmo, J. F. See *Shafiqullah, M. 269-071*

264-327 **Lerche, I.** Reply [to discussion by Amiya K. Sen of "Validity of the hydromagnetic approach in discussing instability of the magnetospheric boundary" (1966)]: Jour. Geophys. Research, v. 73, no. 15, p. 5017, 1968.

Lerici, Carlo M. See *Rainey, Froelich G. 269-452*

271-528 **Lerner, B. L.; Yanovskiy, I. I.; Turlov, P. A.** Mashina dlya obrabotki seysmozapisey PSZ-St [The PSZ-St machine for processing seismic records]: Geofiz Apparatura, no. 31, p. 110-118, illus., 1967.

LeRoux, E. F. See *Adolphson, D. G. 269-349*

270-403 **Leshchuk, F. A.** Primeneniye metoda reguliruyemogo napravlennogo priyema seysmicheskikh voln pri issledovanii glubinnogo stroyeniya zemnoy kory [Use of the controlled direction pickup method in investigating deep crustal structure (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 56-60, illus., 1968.

271-530 **Leshchuk, F. A.** Zastosruvannya laboratornoyi modyfīkatsīyi metodu RNP pry īnterpretatsīyi danykh HSZ [Application of a laboratory modification of the controlled direction pickup method in interpreting deep seismic sounding data (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 4, p. 334-337, illus., 1968.

269-246 **Lessard, L.** Exploration hydrogéologique par prospection électro-sismique et forages du Bassin de Befandriana-Antanimi(h)eva (SW Malgache) [Hydrogeologic exploration by electroseismic prospecting and drilling in the Befandriana-Antanimiheva Basin (SW Malgache)]: Malgache Semaine Geol. Comptes Rendus 1967, p. 91-97, illus., table, 1968.

Létolle, R. See *Labeyrie, J. 269-035*

269-024 **Létolle, René.** Datation par la méthode potassium-argon des terrains Pliocènes et Quaternaires [Dating of Pliocene and Quaternary terranes by the potassium-argon method]: Rev. Géographie Phys. et Géologie Dynam., ser. 2, v. 10, no. 1, p. 65-76, illus., table, 1968.

Létolle, René. See *Cheminee, J. 271-326*

Letov, B. I. See *Kholmyanskiy, M. A. 273-203*

273-021 **Leutwein, F.** Contribution à la connaissance du précambrien récent en Europe Occidentale et development géochronologique du Briovérian en Bretagne (France) [Contribution to knowledge of the recent Precambrian in western Europe and geochronologic development of the Brioverian in Brittany (France) (with English abs.)], *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 673-682, illus., tables, 1968.

Leutwein, Friedrich. See *Zimmerman, Jean-Louis. 270-018*

272-026 **Leutwein, Friedrich; Sonet, Jacques; Zimmermann, Jean-Louis.** Géochronologie et évolution orogénique précambrienne et hercynienne de la partie nord-est du Massif Armoricain [Geochronology and Precambrian and Hercynian orogenic evolution of the northeastern part of the Armoricain Massif (with English, German, and Russian abs.)]: Sci. Terre Mém., no. 11, 83 p., illus., tables, 1968.

274-016 **Leutwein, Friedrich; vonEller, Jean-Paul; Sonet, Jacques; Zimmermann, Jean-Louis.** Identification géochronologique des schistes de Ville (Vosges) comme Brioverien (Proterozoïque superieur) [Geochronologic identification of the schists of Ville (Vosges) as Brioverian (upper Proterozoic) (with English, German, Russian abs.]: Alsace-Lorraine Service Carte Géol. Bull., v. 21, pt. 1, p. 47-52, illus., tables, 1968.

269-651 **Levashev, K. I.** O raspredelenii amplitud i kolichestva elementarnykh voln na summolentakh MRNP [On the distribution of amplitudes and amount of elementary waves on summation tapes of the controlled direction pickup procedure]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 37-43, illus., 1968.

Levchenko, I. G. See *Kozyrev, V. D. 275-173*

265-050 **Levchenkov, O. A.; Ovchinnikova, G. V.; Gerling, E. K.; Shukolyukov, Yu. A.; Mikhaylov, D. A.** Opredeleniya absolyutnogo vozrasta diopsodovykh metasomatitov Aldanskogo massiva [Absolute age determinations on the diopside-bearing metasomatites of the Aldan massif]: Akad. Nauk SSSR Izv. Ser. Geol., no. 7, p. 15-22, illus., table, 1968.

Levchenkov, O. A. See *Shukolyukov, Yu. A. 267-368*

271-513 **Leveque, P.; Martin, G.; Muraour, P.; Ricolvi, M.; Vigneaux, M.** Apports d'une campagne de sismique reflexion a la connaissance paleogeographique du nord du Golfe de Gascogne [Contributions of a seismic reflection survey to paleogeographic knowledge of the northern Gulf of Gascony]: Inst. Geologie Bassin d'Aquitaine Bull., no. 5, p. 186-195, illus., 1968.

270-034 **Levi-Donati, G. R.** The Bur-Gheluai meteorite (mineralogy, structure and metamorphism): Meteoritics, v. 4, no. 1, p. 23-41, illus., table, 1968.

268-555 **Levin, A. N.** O koeffitsiyente otrazheniya ploskikh voln pri normal'nogo padenii na sloy, pomeshchennyy v zhidkuyu sredu [On the coefficient of reflection of plane waves in the case of normal incidence on a layer inserted into a liquid medium]: Prikladnaya Geofizika, no. 52, p. 67-72, illus., 1968.

269-157 **Levin, B. Yu.** O roli vtorichnykh kraterov v formirovanii lunnogo rel'yefa [On the role of secondary craters in the formation of the lunar relief (with English summ.)]: Astron. Zhur., v. 44, no. 4, p. 828-830, illus., 1967.

269-163 **Levin, B. Yu.; Radlova, L. N.** Prichina razlichiy al'bedo na Lune [Cause of differences in albedo on the Moon (with English summ.)]: Astron. Zhur., v. 44, no. 6, p. 1296-1303, illus., table, 1967.

Levin, D. V. See *Gaponenko, G. I. 273-207*

264-198 **Levin, F. K.; Bayhi, J. F.; Grieves, W. A.; Watson, R. J.; Webster, G. M.** Uspekhi razvedochnoy geofiziki za 1962-65 gg. [Developments in exploration geophysics 1962-1965]: Geofiz. Apparatura, no. 33, p. 7-12, 1967.

270-353 **Levin, Franklyn.** Oil exploration technology: Sci. and Technology, no. 86, p. 14 25, illus., 1969.

274-420 **Levin, Franklyn K.; Robinson, Donald J.** Scattering by a random field of surfac scatterers: Geophysics, v. 34, no. 2, p. 170-179, illus., 1969.

266-191 **Levin, G. Ye.; Seryapin, N. M.** Korrektsiya zapisey seysmicheskikh priborov pr nestatsionarnykh kolebaniyakh s pomoshch'yu analogovoy vychislitel'noy mashin [Correction of the records of seismic instruments in the case of nonstationary vibra tions using an analog computer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 91-9 illus., table, 1968.

267-200 **Levin, L. E.; Ul'st, V. G.; Fel'dman, S. L.; Berzin', L. E.** O perspektivakh net tegazonosnosti vpadiny Baltiyskogo morya [On the prospects of oil and gas possibil ties on the Baltic Sea basin]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 25-30, i lus., 1968.

271-254 **Levina, A. P.** Noveyshiye tektonicheskiye dvizheniya v basseyne Srednego V lyuya i ikh vliyaniye na razmeshcheniye almazonosnykh rossypey [Recent tecton movements of the Middle Vilyuy basin and their effect on the distribution of th diamond-bearing placers], *in* Problemy tektonicheskikh dvizheniy i noveyshik struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Na ka," p. 212-218, illus., 1968.

Leviy, N. V. See *Tarakanov, R. Z. 268-309*

Levshin, A. L. See *Arnold, E. P. 266-157*

266-199 **Levshin, A. L.; Frantsuzova, V. I.; Shkadinskaya, G. V.** Vysshiye garmoniki vo Releya i stroyeniye verkhney mantii [Higher harmonics of Rayleigh waves and stru ture of the upper mantle], *in* Nekotoryye pryamyye i obratnyye zadachi seysmolog Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 18 196, illus., tables, 1968.

273-150 **Levshin, A. L.; Frantsuzova, V. I.; Shkadinskaya, G. V.** Amplitudnyye spektry poverkhnostnykh voln [Amplitude spectrums of surface waves], *in* Nekotoryye pryamyye i obratnyye zadachi seỹsmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 197-206, illus., table, 1968.

265-054 **Levskiy, L. K.** Obshchiye voprosy mass-spektrometricheskogo analiza [General questions of mass-spectrometric analysis], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 5-9, 1967.

272-066 **Levskiy, L. K.; Ostanevich, Yu. M.; Tomilov, S. B.** Vozmozhnosti analiza sostoyaniy zheleza v kamennykh meteoritakh s pomoshch'yu effekta Messbauera [Possibilities of analyzing the state of the iron in stony meteorites using the Mössbauer effect (with English summ.)]: Geokhimiya, no. 9, p. 1061-1065, illus., tables, 1968.

274-072 **Levskiy, L. K.; Morozova, I. M.** Vozrast elementov i r-protsess v solnechnoy sisteme [Age of the elements and the r-process in the solar system]: Astron. Zhur., v. 46, no. 1, p. 123-125, illus., 1969.

Levy, P. W. See *Zeller, E. J. 269-055*

Levykin, A. I. See *Volarovich, M. P. 268-160*

Levykin, A. I. See *Volarovich, M. P. 268-161*

267-363 **Lewis, J. F.** Trace elements, variation in alkalis, and the ratio Sr-87/Sr-86 in selected rocks from the Taupo Volcanic Zone: New Zealand Jour. Geology and Geophysics, v. 11, no. 3, p. 608-629, illus., tables, 1968.

272-052 **Lewis, John S.; Krouse, H. Roy.** Isotopic composition of sulfur and sulfate produced by the oxidation of FeS: Earth and Planetary Sci. Letters, v. 5, no. 6, p. 425-428, illus., table, 1969.

268-397 **Lewis, M.** Some experiments on synthetic titanomagnetites: Royal Astron. Soc. Geophys. Jour., v. 16, no. 3, p. 295-310, illus., table, 1968.

275-068 **Ley, Willy.** Inside the orbit of the Earth: New York and London, McGraw-Hill Book Company, 160 p., illus., tables, 1968.

Leyden, Robert. See *Worzel, J. Lamar. 266-510*

Leypunskaya, D. I. See *Savosin, S. I. 272-480*

Leypunskaya, D. I. See *Blankov, Ye. B. 272-563*

265-383 **Lezniak, T. W.; Winckler, J. R.** Structure of the magnetopause at 6.6 R_E in terms of 50- to 150-kev electrons: Jour. Geophys. Research, v. 73, no. 17, p. 5733-5742, illus., tables, 1968.

Liapis, N. See *Papazachos, B. 265-124*

Libby, Fred J. See *Spangler, Daniel P. 269-328*

264-070 **Libby, W. F.** Ice on Venus—Can it exist,: Science, v. 161, no. 3844, p. 916, 1968.

Libby, W. F. See *Berger, Rainer. 265-022*

269-025 **Libby, W. F.** History of radiocarbon dating, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 3-25, illus., tables, 1967.

Libby, W. F. See *Berger, Rainer. 271-017*

Libby, W. F. See *Fabian, P. 272-086*

270-377 **Lichte, D.** Ingenieurgeophysikalische Erschütterungsmessungen zur Beurteilung der Schadenwirkung von Sprengungen [Engineering-geophysical vibration measurements for assessment of the damaging effect of blasting]: Freiberger Forschungshefte, C 225, p. 163-172, illus., 1967.

272-494 **Lidz, L.; Ball, M.; Charm, W.** Geophysical measurements bearing on the problem of the El Pilar fault in the northern Venezuelan offshore: Bull. Marine Sci., v. 18, no. 3, p. 545-560, illus., 1968.

273-489 **Lidz, Louis; Charm, Walter B.; Ball, Mahlon M.; Valdes, Sylvia.** Marine basins off the coast of Venezuela: Bull. Marine Sci., v. 19, no. 1, p. 1-17, illus., table, 1969.

266-177 **Liebermann, Robert C.; Schreiber, Edward.** Elastic constants of polycrystalline hematite as a function of pressure to 3 kilobars: Jour. Geophys. Research, v. 73, no. 20, p. 6585-6590, illus., tables, 1968.

Liebermann, Robert C. See *Anderson, Orson L. 269-222*

271-114 **Liebermann, Robert C.; Pomeroy, Paul W.** Relative excitation of surface waves by earthquakes and underground explosions: Jour. Geophys. Research, v. 74, no. 6, p. 1575-1590, illus., tables, 1969.

Liemohn, H. B. See *Kenney, J. F,. 267-382*

274-317 **Liemohn, H. B.** Whistler dispersion and amplification in the magnetosphere: Trend Eng., v. 21, no. 2, p. 3-7, illus., 1969.

266-053 **Liener, A.; Geiss, J.** Thermoluminescence measurements on chondritic meteorites, Chap. 11.1 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 559-568, illus., table, 1968.

Liener, A. See *Grogler, Norbert. 266-054*

269-145 **Lieske, Jay H.** Mass of the Earth-Moon system from observations of Eros, 1893-1966: Astron. Jour., v. 73, no. 7, p. 628-643, illus., tables, 1968.

273-285 **Liestöl, Olav.** Storbreen Glacier in Jotunheimen, Norway: Norsk Polarinst. Skr., no. 141, 63 p., illus., tables, 1967.

Liiva, A. See *Punning, J. M. 265-020*

265-029 **Liiva, A.; Ilves, E.; Punning, J. M.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Tartu radiocarbon dates I (revisions): Radiocarbon, v. 10, no. 2, p. 465, 1968.

273-307 **Likens, Gene E.; Johnson, Noye M.** Measurement and analysis of the annual heat budget for the sediments in two Wisconsin lakes: Limnology and Oceanography, v. 14, no. 1, p. 115-135, illus., tables, 1969.

Likhite, S. D. See *Radhakrishnamurty, C. 265-434*

268-133 **Lilienberg, D. A.** Qualités géomorphologiques structurales et mouvements tectoniques contemporains dans la vallée de Skopje [Structural geomorphologic qualities and contemporary tectonic movements in the Skopje Valley], *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 95-98, 1968.

269-318 **Liliyenberg, D. A.; Meshcherskiy, I. N.** Novyye dannyye o sovremennykh dvizheniyakh zemnoy kory na Apsheronskom poluostrove [New data on recent crustal movements on the Apsheron Peninsula]: Akad. Nauk SSSR Doklady, v. 279, no. 5, p. 1182-1185, illus., 1968.

268-343 **Lill, Gordon G.** Proyekt Mokhol [The Mohole Project], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 269-274, illus., 1967.

Lilley, E. M. See *Stephens, D. R. 273-055*

265-183 **Lilley, F. E. M.; Carmichael, C. M.** Electromagnetic damping of elastic waves—Experimental results: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 1, p. 825-829, illus., 1968.

266-176 **Lilley, F. E. M.; Smylie, D. E.** Elastic wave motion and a nonuniform magnetic field in electrical conductors: Jour. Geophys. Research, v. 73, no. 20, p. 6527-6533, 1968.

268-028 **Lilov, P.; Grozdanov, L.; Peeva, I.** Otnosno absolyutnata v"rast na svidnenskite i seslavskite magmatiti [On the absolute age of the Svidnja and Seslavci igneous rocks (in Bulgarian with Russian and English summ.)]: Bŭlgarska Akad. Naukite Geol. Inst. Izv., Ser. Geokhim., Mineralog. i Petrog., v. 17, p. 79-82, table, 1968.

267-111 **Lilwall, R. C.; Douglas, A.** Epicenter determination by seismic arrays: Nature, v. 220, no. 5165, p. 362-363, 1968.

Lilwall, R. C. See *Douglas, A. 267-146*

275-136 **Lilwall, R. C.; Douglas, A.** Quest for a P travel time standard: Nature, v. 222, no. 5197, p. 975-977, illus., table, 1969.

Lin, R. D. See *Anderson, K. A. 275-298*

268-385 **Lincoln, J. V.; Stickland, A. C.** (compiler, editor). Annals of the IQSY—V. 2, Solar and Geophysical events 1960-1965 (calendar record): Cambridge, Mass., Massachusetts Inst. Technology Press, 297 p., tables, 1968.

267-410 **Lincoln, J. Virginia.** Morphology of solar and geophysical activity during February 1964 and March 1966 [with French abs.] Annales Géophysique, v. 24, no. 3, p. 793-798, illus., 1968.

Lind, E. N. See *Metallova, V. V. 267-448*

Lind, G. See *Ramachandra, B. L. 271-271*

Lind, Gustaf. See *Ramberg, Ivar B. 272-210*

Linde, R. K. See *Wong, J. Y. 265-261*

274-485 **Lindseth, Roy.** The application of transforms to digital well log operations, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans., Supp.: Houston, Tex., Soc. Prof. Well Log Analysts, p. T1-T20, illus., 1969.

Lindsley, Nancy C. See *Beck, Myrl E., Jr. 273-372*

Linford, J. G. See *Christoffel, D. A. 266-213*

274-054 **Lingenfelter, Richard; Schubert, Gerald; Peale, Stanton J.** Lunar rivers or coalesced chain craters?: Science, v. 165, no. 3889, p. 202, 1969.

Lingenfelter, Richard E. See *Peale, Stanton J. 268-091*

271-344 **Link, František.** Auroral and archaeomagnetic variations in the past: Československá Akad. Věd Studia Geophys. et Geod., v. 13, no. 1, p. 90-93, illus., 1969.

Lin'kov, Ye. M. See *Smirnov, V. N. 274-410*

265-460 **Linsser, Helmut.** Transformation of magnetometric data into tectonic maps by digital template analysis: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 179-207, illus., 1968.

273-091 **Lipschutz, M. E.** Shock effects in iron meteorites—A review, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 571-583, illus., 1968.

273-047 **Lipschutz, M. R.; Jaeger, R. R.** Shock-induced preferred disorder in solids: Nature, v. 222, no. 5195, p. 766-767, 1969.

Lipschutz, Michael E. See *Jaeger, Ralph R. 264-053*

Lipschutz, Michael E. See *Jain, Anant V. 266-050*

273-110 **Lipskiy, Yu. N.** Nekotoryye itogi global'nogo obsledovaniya poverkhnosti Luny [Some results of global inspection of the surface of the Moon]: Akad. Nauk SSSR Vestnik, no. 6, p. 86-94, illus., 1968.

270-489 **Lishman, J. R.** Use of the Sidewall Neutron log in the Keg River Formation of the Zama area, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. A1-A10, illus., 1968.

266-344 **Lishnevskiy, E. N.** O nekotorykh osobennostyakh stroyeniya zemnoy kory i razmeshchenii olovyannogo i zolotogo orudeneniya na Dal'nem Vostoke v svete gravimetricheskikh dannykh [On some features of crustal structure and distribution of the tin and gold mineralization of the Far East in the light of gravimetric data]: Akad. Nauk SSSR Doklady, v. 181, no. 6, p. 1455-1458, illus., 1968.

270-218 **Lishnevskiy, E. N.; Yeliseyeva, I. S.; Bogomazova, T. A.** Stroyeniye zemnoy kory rayonov Verkhnego Priamur'ya i Aldanskogo shchita po geofizicheskim dannym [Crustal structure of the Upper Amur and Aldan shield regions according to geophysical data]: Sovetskaya Geologiya, no. 7, p. 75-85, illus., table, 1968.

Lisitsyn, A. P. See *Kuznetsov, Yu. V. 267-366*

Lisitsyn, A. P. See *Il'in, A. V. 270-438*

Lisitsyna, N. A. See *Krylov, A. Ya. 272-033*

Litinskiy, V. A. See *Gaponenko, G. I. 273-207*

264-366 **Litinskiy, V. M.** Irregularities in the distribution of the disturbance vectors of geomagnetic bays: Geomagnetism and Aeronomy, v. 7, no. 6, p. 911-912, illus., 1967.

266-438 **Litinskiy, V. M.; Sumaruk, P. V.** O tokovykh sistemakh geomagnitnykh bukht v srednikh i nizkikh shirotakh [On the current systems of geomagnetic bays in middle and low latitudes (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 155-157, illus., 1967.

268-608 **Litvin, V. M.** Geomorfologiya sredinno-okeanicheskogo khrebta v Norvezhskom i Grenlandskom moryakh [Geomorphology of the mid-oceanic ridge in the Norwegian and Greenland seas (with English summ.)]: Okeanologiya, v. 8, no. 1, p. 86-93, illus., 1968.

Litvin, Yu. A. See *Butuzov, V. P. 268-158*

Litvinenko, I. V. See *Demenitskaya, R. M. 265-360*

266-535 **Litvinenko, I. V.** Seysmorazvedka pri izuchenii osnovnykh struktur Kol'skogo poluostrova i Severnoy Karelii [Seismic surveying to study the fundamental structures of the Kola Peninsula and Northern Karelia], *in* Problemy izucheniya geologii dokembriya—Vses. Soveshchaniye po voprosam izucheniya i metodiki kartirovaniya dokembriyskikh obrazovaniy, Kirovsk 1964, materialy: Leningrad, Izdatel'stvo "Nauka," p. 222-227, 1967.

268-284 **Litvinenko, O. K.; Melikov, V. R.** O vozomozhnosti opredeleniya formy tela po anomaliyam vertikal'noy proizvodnoy gravitatsionnogo potentsiala [On the possibility of determining the shape of a body from anomalies of the vertical derivative of the gravity potential]: Moskov. Univ. Vestnik, ser. 4, no. 5, p. 110-114, illus., table, 1968.

Litvinenko, O. K. See *Fedynskiy, V. V. 269-284*

Litvinenko, O. K. See *Tikhonov, A. N. 271-293*

Litvinenko, O. K. See *Vashchilov, Yu. Ya. 273-221*

Litvinov, E. M. See *Gorodnitskiy, A. M. 273-200*

Litvinov, E. M. See *Gorodnitskiy, A. Am. 273-210*

274-459 **Litvinov, E. M.; Trubyatchinskiy, N. N.** O prisposoblenii karotazhnoy apparatury k issledovaniyam okeana [On the adaptation of logging apparatus to the investigation of the ocean], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p 207-210, 1968.

274-460 **Litvinov, E. M.** Otsenka nadezhnosti karotazhnoy telemetricheskoy sistemy v usloviyakh okeana [Estimation of the reliability of a telemetered logging system in the conditions of the ocean], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 215-220, tables, 1968.

264-283 **Litvinov, V. V.; Shevchenko, I. N.** Geotermicheskiye usloviya v yugo-vostochnoy chasti Dneprovsko-Donetskoy vpadiny [Geothermal conditions in the southeastern part of the Dnieper-Donets basin]: Sovetskaya Geologiya, no. 5, p. 141-145, illus., 1968.

264-233 **Liu, Kwang-Ya.** Neotectonics of the north China platform [in Chinese with Russian summ.]: Acta Geol. Sinica, v. 44, no. 1, p. 24-36, illus., tables, 1967.

Livingston, Donald E. See *Maugher, Richard L. 264-013*

273-031 **Livingston, Donald E.; Damon, Paul E.** The ages of stratified Precambrian rock sequences in central Arizona and northern Sonora, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 763-772, illus., 1968.

Livingston, W. C. See *Norton, R. H. 268-087*

267-590 **Livshits, M. Kh.** Prostranstvennoye seysmozondirovaniye prelomlennymi volnami v rayone Yuzhnogo Sakhalina [Spatial seismic sounding by means of refracted waves in the region of South Sakhalin]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 5, p. 81-93, illus., tables, 1968.

Livshits, M. Kh. See *Bikkenina, S. K. 268-313*

Livshits, M. Kh. See *Gaynanov, A. G. 268-315*

Liwshitz, M. See *Gale, W. 274-050*

268-249 **Lliboutry, L.** Steady-state temperatures at the bottom of ice sheets and computation of the bottom ice flow law from the surface profile [with French and German abs.]: Jour. Glaciology, v. 7, no. 51, p. 363-376, illus., 1968.

275-211 **Lliboutry, L.** The dynamics of temperate glaciers from the detailed viewpoint [with French and German abs.]: Jour. Glaciology, v. 8, no. 53, p. 185-205, illus., tables, 1969.

272-200 **Lliboutry, L. A.** How ice sheets move: Sci. Jour., v. 5, no. 4, p. 50-55, illus., 1969.

267-297 **Lloyd, E. F.** Thermal activity at Waiotapu, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 42-49, illus., tables, 1963.

266-404 **Lloyd, R. M.** Oxygen isotope behavior in the sulfate-water system: Jour. Geophys. Research, v. 73, no. 18, p. 6099-6110, illus., tables, 1968.

Lobach-Zhuchenko, S. B. See *Kratz, K. O. 273-019*

Lobach-Zuchenko, S. B. See *Gerling, E. K. 268-025*

270-446 **LoBascio, A.** Considerations on tilt observations at the Vesuvius Observatory: Bull. Volcanol., v. 32, no. 2, p. 377-381, illus., 1968.

Lobastova, L. I. See *Ishutin, V. V. 270-384*

Lobdell, John L. See *Herrin, Eugene. 265-105*

Lobdell, John L. See *Engdahl, Eric R. 267-095*

267-624 **Loddo, M.; Mongelli, F.** Regime termico di un pozzo perforato a percussione [The thermal regime of a well perforated by percussion (with English abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 44-58, illus., tables, 1968.

273-310 **Loddo, M.; Mongelli, F.** Studio delle cause d'errore di un metodo di misura della conducibilita' termica delle carote [Study of the cause of errors of a method of measurement of thermal conductivity of cores (with English summ.)]: Boll. Geofisica Teor. ed Appl., v. 9, no. 36 (Bari Univ. Ist. Geodesia e Geofisica Pubb., no. 52), p. 344-357, illus., tables, 1967.

Lodwick, G. D. See *Bellamy, C. J. 274-267*

269-265 **Lodwick, K. B.** The status of offshore exploration in Australia and methods used, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: United Nations ECAFE Mineral Resources Devel. Series, no. 26, p. 551-554, 1967.

Logachev, N. A. See *Florensov, N. A. 271-212*

Loginov, V. Ye. See *Bulakh, Ye. G. 264-199*

275-350 **Loginov, V. Ye.** Resheniye obratnoy zadachi magnitometrii dlya pryamougol'nogo brusa metodom skoreyshego spuska [Solution of the inverse problem of magnetometry for a rectangular bar by the method of steepest descent (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 29-37, illus., 1969.

Logvinov, I. M. See *Dublyanskiy, V. M. 266-226*

Logvinov, I. M. See *Dubinskiy, V. N. 268-191*

Logvinov, I. M. See *Rokityanskiy, I. I. 274-188*

265-625 **Lohr, J.** The border of the Rhinegraben near the town of Weinheim as seen from reflection seismograph survey, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 18-19, illus., 1967.

Lohse, Jürgen. See *Schmeling, Renate. 266-567*

Lomakin, V. S. See *Khalevin, N. I. 270-383*

70-286 **Lomanyy, V. D.** O chuvstvitel'nosti parorubidiyevogo magnitometra [Sensitivity of a rubidium vapor magnetometer]: Geofiz. Apparatura, no. 35, p. 39-40, 1968.

70-293 **Lomanyy, V. D.; Polyakov, B. F.** O forme signala opticheskoy nakachki v skheme parorubidiyevogo M_Z-magnitometra [On the shape of the optical pumping signal in the scheme of the M_Z rubidium vapor magnetometer]: Geofiz. Apparatura, no. 36, p. 67-70, illus., 1968.

71-390 **Lomanyy, V. D.; Yanovskiy, B. M.** O tochnosti parorubidiyevogo magnitometra [On the accuracy of the rubidium vapor magnetometer]: Geofiz. Apparatura, no. 31, p. 31-34, illus., 1967.

Lomnitz, Cinna. See *Bolt, B. A. 269-182*

72-102 **Lomnitz, Cinna.** A definition of travel-time anomalies: Seismol. Soc. America Bull., v. 59, no. 1, p. 421-425, illus., 1969.

72-189 **Lomnitz, Cinna.** Sea floor spreading as a factor of tectonic evolution in southern Chile: Nature, v. 222, no. 5191, p. 366-369, illus., 1969.

Loncarevic, B. D. See *Aumento, F. 272-518*

71-539 **Londe, P.** Stabilité des massifs rocheux [Stability of rock masses (with English, German, Spanish summ.)]: Inst. Tech. Bâtiment et Travaux Publics Annales, v. 21, no. 251, p. 1615-1637, illus., 1968.

68-198 **Londoño P., Darío.** Los computadores digitales en la exploración petrolífera [Digital computers in petroleum exploration]: DYNA, no. 84, p. 53-60, 1967.

Long, Austin. See *Mielke, James E. 271-014*

Long, Austin. See *Grey, D. C. 272-009*

72-134 **Long, Leland Timothy; Berg, Joseph W., Jr.** Transmission and attenuation of the primary seismic wave, 100 to 600 km: Seismol. Soc. America Bull., v. 59, no. 1, p. 131-146, illus., tables, 1969.

66-101 **Long, R. E.** Temporary seismic array stations: Royal Astron. Soc. Geophys. Jour., v. 16, no. 1, p. 37-45, illus., 1968.

Longin, R. See *Evin, J. 271-009*

64-306 **Longinelli, A.** Oxygen isotopic composition of sulfate ions in water from thermal springs: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 206-210, illus., tables, 1968.

67-341 **Longinelli, A.; Nuti, S.** Oxygen isotopic composition of phosphorites for marine formations: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 13-16, illus., table, 1968.

73-351 **Loomer, E. I.; vanBeek, G. Jansen.** The effect of the solar cycle on magnetic activity at high latitudes [with French abs.]: Dominion Observatory Ottawa Pubs., v. 37, no. 6, p. 169-180, illus., tables, 1969.

Loosli, H. H. See *Aegerter, S. K. 269-027*

69-058 **Loosli, H. H.; Oeschger, H.; Wahlen, M.** New attempts in low-level counting and a search for cosmic-ray-produced ^{39}Ar, *in* Radioactive dating and methods of low-level counting—IAEA- ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 593-601, illus., tables, 1967.

64-411 **Lopatin, B. G.; Fedorov, L. V.** O znachenii magnitnoy vospriimchivosti piroksenovykh gneysov dlya raschleneniye metamorficheskikh tolshch Anabarskogo shchita [On the significance of magnetic susceptibility of the pyroxene gneisses for

subdivision of the metamorphic series of the Anabar shield]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 94-99, illus., tables, 1968.

Lopatina, T. A. See *Blinov, G. I. 269-206*

Lopatina, T. A. See *Grin, V. P. 269-659*

268-190 **Lopatnikov, V. I.** Khod aktivnosti elektrotelluricheskogo polya v more za poluperiod solnechnogo tsikla po nablyudeniyam u yuzhnogo berega Kryma [Course of activity of the electrotelluric field in the sea during the half period of the solar cycle according to observations near the south coast of Crimea (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 133-136, illus., 1967.

265-112 **Lopez Arroyo, Alfonso.** Estudio del mecanismo focal mediante ondas transversales—Aplicación a sismos próxima [Study of the focal mechanism of transverse waves—Application to near earthquakes (with English summ.)]: Rev. Geofísica, v. 25, no. 98, p. 95-126, illus., table, 1966.

Loran, J. See *Troitskaya, V. A. 274-338*

Lorand, J. See *Kovtun, A. A. 265-245*

264-039 **Lord, H. C.** Hydrogen and helium ion implantation into olivine and enstatite—Retention coefficients, saturation concentrations, and temperature-release profiles: Jour. Geophys. Research, v. 73, no. 16, p. 5271-5280, illus., tables, 1968.

Lorin, J. C. See *Lal, D. 269-093*

264-308 **Lorius, C.; Hagemann, R.; Nief, G.; Roth, E.** Teneurs en deuterium le long d'u
profil de 106 m dans le névé antarctique—Application à l'étude des variations cli
matiques [Deuterium content on a 106-m profile in Antarctic névé—Application t
the study of climatic variations]: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 237
244, illus., table, 1968.

Loseva, L. Ye. See *Florenskiy, K. P. 267-068*

Loseva, L. Ye. See *Vinogradov, A. P. 272-065*

264-496 **Lossovskiy, Ye. K.** Ispol'zovaniye sinteticheskikh seysmogramm dlya izucheniy
vozmozhnosti spektral'no-izbiratel'nogo oslableniya mnogokratnykh otrazhennyk
voln [Use of synthetic seismograms to study the possibility of spectral-selectiv
weakening of multiple reflections (with English summ.)]: Akad. Nauk Ukrain. SS
Geofiz. Sbornik, no. 23, p. 57-64, illus., 1968.

264-498 **Lossovskiy, Ye. K.** Ob intensivnosti summarnykh mnogokratnykh voln
sloistykh sredakh [On the intensity of additive multiple reflections in layered med
ums (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 32
43, illus., 1968.

265-203 **Lossovskiy, Ye. K.** Sinteteicheskiye seysmogrammy i vozmozhnosti spektral'nog
oslableniya mnogokratnykh otrazhennykh voln [Synthetic seismograms and poss
bilities of spectral suppression of multiply reflected waves]: Akad. Nauk SSSR Iz
Fizika Zemli, no. 6, p. 62-69, illus., 1968.

266-526 **Lossovskiy, Ye. K.** Ob ispol'zovanii teoreticheskikh seysmogramm, sintezirova
nykh po dannym elektrokarotazha, dlya izucheniya mnogokratnykh otrazhennyk
voln v ravninnom Krymu [On the use of synthetic seismograms, synthesized fro
electrical logging data, for studying multiple reflections in lowland Crimea (wi
English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. I
Byull., Geofizika i Astronomiya, no. 11, p. 78-85, illus., 1967.

270-405 **Lossovskiy, Ye. K.** Ob intensivnosti summarnykh mnogokratnykh otrazhennykh voln v sloistykh geologicheskikh sredakh II [On the intensity of additive multiple reflections in layered geologic mediums, (Pt.) 2 (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 52-62, illus., 1968.

275-435 **Lotzsch, W.; Gerstenberger, W.** Zur Frage der Eichung der kernphysikalischen Bohrlochmessverfahren und zu ihren Entwicklungsmoglichkeiten [On the question of the calibration of nuclear logging procedures and on the possibilities of their development (with Hungarian and Russian summ.)]: Magyar Geofizika, v. 10, no. 1, p. 21-31, illus., 1969.

275-053 **Lou, Y. S.; Weidner, Don K.; Vaughan, Otha H., Jr.; West, George S., Jr.** Martian predictions: Science, v. 165, no. 3890, p. 234, 1969.

Louapre, M. E. See *Ewen, H. I. 270-100*

270-101 **Louapre, Merlin E.** Phased arrays for spaceborne microwave sensors, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 59-68, illus., 1968.

264-103 **Loupekine, I. S.** Seismology in east Africa, *in* Report on the geology and geophysics of the east African rift system: [Nairobi], East African Comm. Cooperation Geophysics, p. 20-32, 1965.

Love, J. D. See *Tibbetts, B. L. 273-456*

274-033 **Loveland, W.; Schmitt, R. A.; Fisher, D. E.** Aluminum abundances in stony meteorites: Geochim. et Cosmochim. Acta, v. 33, no. 3, p. 375-385, illus., tables, 1969.

264-311 **Lovering, J. F.; Tatsumoto, M.** Lead isotopes and the origin of granulite and eclogite inclusions in deep-seated pipes: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 350-356, tables, 1968.

Lovering, J. F. See *Polach, H. A. 265-010*

Lovering, J. F. See *Morgan, J. W. 269-096*

Lovering, J. F. See *Compston, W. 275-273*

266-415 **Lovering, T. S.; McCarthy, J. Howard,; Friedman, Irving.** Significance of O-18:O-16 and C-13:C-12 ratios in hydrothermally dolomitized limestones and manganese carbonate replacement ores of the Drum Mountains, Juab County, Utah, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 658-671, illus., tables, 1967; originally published *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

275-295 **Lovering, T. S.; McCarthy, J. G.; Friedman, I.** Znacheniye otnosheniy O-18:O-16 i C-13:C-12 v gidrotermal'no dolomitizirovannykh izvestnyakakh i margantsevykh karbonatnykh metasomaticheskikh rudakh (Drum mauntinz, Okrug Dzhuab, Yuta) [Significance of O-18:O-16 and C-13:C-12 ratios in hydrothermally dolomitized limestones and manganese carbonate replacement ores of the Drum Mountains, Juab County, Utah)], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 616-629, illus., tables, 1964.

265-012 **Lowdon, J. A.; Blake, W., Jr.** Geological Survey of Canada radiocarbon dates VII: Radiocarbon, v. 10, no. 2, p. 207-245, tables, 1968.

271-005 **Lowdon, J. A.; Wilmeth, R.; Blake, W., Jr.** Geological Survey of Canada radiocarbon dates VIII: Radiocarbon, v. 11, no. 1, p. 22-42, table, 1969.

270-103 **Lowe, D. S.** Line scan devices and why use them, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 77-101, illus., 1968.

Lowe, D. S. See *Horvath, R. 270-107*

270-253 **Lowenstam, Heinz A.** Paleotemperatures of the Permian and Cretaceous periods, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 227-248, 251-252, illus., 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 132-152, illus., 1968.

265-395 **Lowes, F. J.; Wilkinson, I.** Geomagnetic dynamo—An improved laboratory model: Nature, v. 219, no. 5155, p. 717-718, illus., 1968.

269-356 **Lowman, Paul D., Jr.** Composition of the lunar highlands—Possible implications for evolution of the Earth's crust: Jour. Geophys. Research, v. 74, no. 2, p. 495-504, 1969.

Lowrie, Allen, Jr. See *Fox, Paul J. 273-486*

274-357 **Lowrie, W.; Fuller, M.** Effect of annealing on coercive force and remanent magnetizations in magnetite: Jour. Geophys. Research, v. 74, no. 10, p. 2698-2710, illus., table, 1969.

Lowry, M. A. See *Adams, R. D. 270-077*

264-420 **Lozano Calvo, Luis.** Estudio de las anomalias magnéticas y su interpretacion geofísica [Study of magnetic anomalies and their geophysical interpretation (with English summ.)]: Rev. Geofísica, v. 25, nos. 99-100, p. 155-165, illus., table, 1966

266-517 **Lozinsky, Z. N.; Sokolov, A. F.** O trassirovanii MOV diz"yunktivnykh narusheniy nebol'shoy amplitudy v predelakh Kuybyshevskoy oblasti [On the tracing by the reflection method of small-amplitude faults within the Kuybyshev Region]: Razved. Geofizika, no. 25, p. 15-19, illus., 1968.

264-487 **Lozovskaya, I. F.** Vydeleniye struktur malykh razmerov na fone soizmerimykh po amplitude pogreshnostey vychisleniya glubin [Bringing out structures of small dimensions against a background of depth calculation errors commensurate with their amplitude]: Prikladnaya Geofizika, no. 50, p. 45-65, illus., 1967.

268-552 **Lozovskaya, I. F.** Vliyaniye chislovoy fil'tratsii pri postroyenii seysmicheskikh razrezov na kachestvo vyyavleniya tektonicheskikh narusheniy [Effect of numerica filtration in plotting seismic sections on the quality of detection of faults]: Priklad naya Geofizika, no. 52, p. 26-32, illus., 1968.

Lucas, Dennis R. See *Runge, Richard J. 274-477*

267-079 **Lucas, J. W.; Garipay, R. R.; Hagemeyer, W. A.; Saari, J. M.; Smith, J. W.; Vi kus, G.** Lunar surface temperatures and thermal characteristics—Surveyor 5 scienc results: Jour. Geophys. Research, v. 73, no. 22, p. 7209-7219, illus., table, 1968.

Lucas, J. W. See *Vitkus, G. 268-081*

275-074 **Lucas, J. W.; Hagemeyer, W. A.; Saari, J. M.; Stimpson, L. D.; Vickers, J. M.** Lunar surface temperatures and thermal characteristics, *in* Surveyor project final re port—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tec Rept. 32-1265, p. 209-244, illus., 1969.

270-456 **Luchitskiy, I. V.** Problema unasledovannogo razvitiya magmatizma [Th problem of the inherited development of magmatism (with English summ.)], *in* Inte nat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm tektogenez: Moscow, Izdatel'stvo "Nauka," p. 211-215, table, 1968.

Ludwig, W. J. See *Den, N. 271-506*

Ludwig, William J. See *Ewing, John. 268-211*

269-675 **Ludwig, William J.; Ewing, John I.; Ewing, Maurice.** Structure of Argentine continental margin: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 12, p. 2337-2368, illus., table, 1968.

Luginets, A. P. See *Bobrov, Yu. V. 264-267*

Luginets, A. P. See *Stroyev, P. A. 264-268*

Luginina, N. A. See *Rokityanskiy, I. I. 274-188*

267-465 **Lugovenko, V. N.** Anomalous magnetic field in the oceans: Geomagnetism and Aeronomy, v. 8, no. 2, p. 305-307, illus., table, 1968.

272-206 **Luiz, A. M.** Gravity variations and precipitation: Canadian Jour. Earth Sci., v. 6, no. 1, p. 190-192, illus., table, 1969.

Lukhminskiy, B. Ye. See *Denisik, S. A. 272-552*

Lukhminskiy, B. Ye. See *Berzin, A. K. 272-568*

Lukhminskiy, B. Ye. See *Berzin, A. K. 272-569*

275-380 **Lukinov, A. G.; Pustil'nikov, M. R.** Dannyye seysmorazvedki o vyklinivanii kompleksov mezozoya v Vostochno-Kubanskom progibe [Seismic survey data on the pinching out of Mesozoic complexes in the East Kuban depression]: Neftegazovaya Geologiya i Geofizika, no. 3, p. 39-41, illus., 1969.

Lukk, A. A. See *Matveyeva, N. N. 266-142*

267-411 **Lundbak, Asger.** Solar X-rays and related phenomena [with French abs.]: Annales Géophysique, v. 24, no. 3, p. 799-805, illus., tables, 1968.

266-541 **Lundborg, N.** Strength of rock-like materials: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 5, p. 427-454, illus., table, 1968.

Lundien, J. R. See *Moore, R. K. 270-115*

271-224 **Lungersgauzen, G. F.** O sovremennoy geologicheskoy epokhe i yeye veroyatnykh analogakh v istorii Zemli [On the present geologic epoch and its probable analogs in Earth history], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 7-15, illus., 1968.

Luongo, Giuseppe. See *Imbo, Giuseppe. 270-443*

Luongo, Giuseppe. See *Imbo, Giuseppe. 270-445*

265-135 **Luosto, U.** Determination of the unified magnitudes of earthquakes from the records of Nurmijarvi station: Geophysica, v. 9, no. 4, p. 293-300, illus., tables, 1967.

265-619 **Luosto, U.** Preliminary results of a seismic refraction study of the Earth's crust in S. W. Finland: Geophysica, v. 9, no. 4, p. 301-306, illus., tables, 1967.

264-501 **Lur'ye, A. G.** Izucheniye usloviy vozbuzhdeniya pri rabotakh metodom otrazhennykh voln [Study of the conditions of generation in operations by the reflection method]: Razved. Geofizika, no. 23, p. 10-18, illus., tables, 1967.

270-169 **Lutsishin, A. S.; Mizyuk, L. Ya.; Soprunyuk, P. M.** Skhemy zadayushchikh generatorov na poluprovodnikovykh elementakh [Schemes of master generators on semiconducting elements]: Geofiz. Apparatura, no. 35, p. 104-108, illus., 1968.

Lutsuk, Ye. M. See *Malovitskiy, Ya. P. 275-381*

265-258 **Lutsyshin, A. S.; Mizyuk, L. Ya.; Soprunyuk, P. M.** O postroyenii zadayushchik generatorov dlya induktivnoy elektrorazvedki i vybore elementov skhem [On co struction of pre-set generators for inductive electrical surveying and choice of el ments of the schemes]: Geofiz. Apparatura, no. 32, p. 67-74, illus., 1967.

266-484 **Luyendyk, Bruce P.; Mudie, John D.; Harrison, C. G. A.** Lineations of magnet anomalies in the northeast Pacific observed near the ocean floor: Jour. Geophy Research, v. 73, no. 18, p. 5951-5957, illus., tables, 1968.

274-002 **Luyendyk, Bruce P.; Fisher, David E.** Fission track age of magnetic anoma 10—A new point on the sea-floor spreading curve: Science, v. 164, no. 3887, 1516-1517, table, 1969.

Lyakhov, L. L. See *Zubatareva, L. I. 267-475*

268-600 **Lyakhovitskiy, F. M.; Polteva, M. N.** Eksperimental'nyye issledovaniya opredeleniyu predela prochnosti gornykh porod na szhatiye po uprugim khara teristikam [Experimental investigation on the determination of the limit of compre sive strength of rocks from the elastic characteristic], *in* Simpozium po fiziko-me hanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 196 Doklady: Moscow, Izdatel'stvo "Nauka," p. 211-215, illus., tables, 1968.

Lyall, Anil K. See *Swift, Donald J. P. 269-607*

266-192 **Lyamzina, G. A.** Kolebaniya zemlyanoy plotiny pri vzryvakh [Vibrations of earth dam in explosions], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR In Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 44-70, illus., tables, 196

Lyapishev, A. M. See *Marderfel'd, B. Ye. 264-186*

Lyapishev, A. M. See *Van'yan, L. L. 264-187*

275-155 **Lyapustin, B. A.** Trassirovaniye Samaro-Kinel'skogo progiba Kamsko-Kinel'sk sistemy depressiy po dannym elektrorazvedki stanovleniyem magnitnogo po [Tracing the Samar-Kinel downwarp of the Kama-Kinel system of depressions on basis of data of magnetic-field-buildup electrical surveying]: Neftegazov Geologiya i Geofizika, no. 2, p. 29-34, illus., 1969.

Lyatskaya, A. M. See *Bryunelli, B. Ye. 269-412*

Lyatskiy, V. B. See *Bryunelli, B. Ye. 269-412*

264-149 **Lykov, V. I.; Mailyan, R. A.; Nepesov, R. D.** Metodika vyyavleniya razlomov kartam epitsentrov zemletryaseniy Turkmenii i kharakteristika ikh seysmichnosti procedure for bringing out abyssal faults from maps of earthquake epicenters Turkmenia and the characteristics of their seismicity]: Akad. Nauk Turkmen. S Izv. Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 2, p. 42-48, illus., 1968.

Lykov, V. I. See *Amurskiy, G. I. 269-273*

Lykov, V. I. See *Amurskiy, G. I. 273-467*

Lynam, C. See *Rothwell, P. 272-321*

Lynch, Vance M. See *Slack, Howard A. 265-454*

Lyon, E. F. See *Siscoe, G. L. 268-374*

273-006 **Lyons, J. B.; Faul, H.** Isotope geochronology of the northern Appalachi Chap. 23 *in* Studies of Appalachian geology, northern and marine (Zen, E-an, others, editors): New York and London, Interscience Publishers, p. 305-318, il tables, 1968.

70-237 **Lysak, S. V.** Geotermiya Pribaykal'ya [Geothermy of the Baikal area (with English summ., p. 142)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 16-21, 1968.

Lysenko, G. M. See *Matveyev, P. S. 266-171*

Lysyakov, L. M. See *Khrychev, B. A. 267-332*

64-054 **Lyttleton, R. A.** On the origin of tektites: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 191-204, illus., 1968.

70-055 **Lyttleton, R. A.** On the theory of the structure of Mars: Royal Astron. Soc. Monthly Notices, v. 141, no. 2, p. 251-253, 1968.

74-061 **Lyttleton, Raymond A.** Dynamical capture of the Moon by the Earth: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1020, 16 p., illus., tables, 1966.

64-178 **Lyubavin, L. M.; Shaub, Yu. B.** Kompleksnaya interpretatsiya aeroelektrorazvedke i aeromagnitnykh dannykh s pomoshch'yu korrelyatsionnykh funktsii [Collective interpretation of aeroelectrical and aeromagnetic data using correlation functions]: Razved. i Okhrana Nedr, no. 6, p. 40-45, illus., 1968.

75-153 **Lyubavin, L. M.; Murova, E. V.** Kompleksnaya aeroelektro-magnitnaya s"yemka pri geologicheskom kartirovanii na Kol'skom poluostrove [Combined airborne electrical and magnetic surveying in geologic mapping on the Kola Peninsula]: Sovetskaya Geologiya, no. 2, p. 110-118, illus., 1969.

Lyubavin, Yu. P. See *Ivanov, V. F. 270-524*

Lyubimov, A. A. See *Lyubimov, G. A. 265-330*

67-267 **Lyubimov, A. A.; Lyubimov, G. A.** Ispol'zovaniye koeffitsiyenta Puassona dlya geologicheskoy interpretatsii gravitatsionnykh i magnitnykh anomaliy-analogov [Use of the Poisson coefficient for geologic interpretation of gravity and magnetic anomaly analogs]: Razved. i Okhrana Nedr, no. 7, p. 38-42, illus., tables, 1968.

65-330 **Lyubimov, G. A.; Lyubimov, A. A.** Opredeleniye optimal'noy dlitel'nosti zvena reysa pri nablyudeniyakh s gravimetrami [Determination of optimum duration of a traverse sector in gravimeter observations]: Razved. Geofizika, no. 24, p. 46-48, illus., 1967.

Lyubimov, G. A. See *Lyubimov, A. A. 267-267*

Lyubimov, V. M. See *Zharkov, V. N. 265-155*

Lyubimov, V. M. See *Zharkov, V. N. 265-156*

Lyubimov, V. M. See *Zharkov, V. N. 267-150*

Lyubimov, V. M. See *Zharkov, V. N. 273-134*

66-369 **Lyubimova, Ye. A.** Izucheniye teplovykh potokov iz nedr Zemli [Study of heat flow from the Earth's interior]: Akad. Nauk SSSR Vestnik, no. 1, p. 71-76, illus., 1968.

Lyubimova, Ye. A. See *Lakhtionov, M. O. 267-307*

68-293 **Lyubimova, Ye. A.** Temperature profiles for the continental and oceanic crust, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 17-21, illus., tables, 1968.

69-353 **Lyubimova, Ye. A.** O svyazi raspredeleniya teplovogo potoka s tektonicheskimi strukturami [On the relationship of the distribution of heat flow to tectonic structures (with English summm.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki Moscow, Izdatel'stvo "Nauka," p. 37-42, illus., 1968.

272-235 **Lyubimova, Ye. A.** Warmestrommessungen—Beitrag zur Klarung von Vorgangen in oberen Erdmantel [Heat flow measurements—Contribution to the clarification of processes in the upper mantle]: Freiberger Forschungshefte C 238, p. 33-43 illus., table, 1968.

272-246 **Lyubimova, Ye. A.; Tomera, G. A.; Aleksandrov, A. L.** Teplovoy potok cherez dno Arkticheskogo basseyna v rayone khrebta Lomonosova [Heat flow through the Arctic Ocean floor in the region of the Lomonosov Ridge]: Akad. Nauk SSSR Doklady, v. 184, no. 2, p. 403-405, illus., table, 1969.

275-256 **Lyubimova, Ye. A.** Istochniki vnutriplanetnogo tepla [Sources of internal heat o the planet], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy V. 1: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 30-38, illus., table, 1963.

Lyulik, V. P. See *Afanas'yev, Yu. V. 270-289*

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Maaz, Richard. See *Ullmann, Wolfgang. 265-133*

265-078 **Mabuchi, H.; Tobailem, J.; Leger, C.; Bibron, R.; Biettmann, D.** Radioactivité induite par le rayonnement cosmique dans la méteorite Granès [Radioactivity induced by cosmic radiation in the Granès meteorite (with English abs.)]: Geochim. e Cosmochim. Acta, v. 32, no. 9, p. 949-963, illus., tables, 1968.

Mabuchi, Hisao. See *Tobailem, Jacques. 266-055*

MacAulay, H. A. See *Hobson, G. D. 274-425*

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MacClintock, Copeland. See *Pannella, Giorgio. 272-129*

MacDonald, Frank H. See *Key, Charles R. 270-430*

265-040 **MacDonald, George F.** Debert—A palaeo-Indian site in central Nova Scot [with French abs.]: Canada Natl. Mus. Anthropology Papers, no. 16, 207 p., illus., t bles, 1968.

MacDonald, Harold C. See *Dellwig, Louis Field. 270-114*

MacDonald, Harold C. See *Rouse, John Wilson, Jr. 274-168*

270-179 **MacDonald, William D.** Continental drift and the Caribbean (Desplazamien continental y el Caribe): Bol. Inf., v. 11, no. 1, p. 17-23, table, 1968.

273-289 **MacElvain, Robert C.** Gravity map of Monroe County, Alabama: Alabama Ge Survey Map 62, scale about 1 in. to 1 mi., text [1968?].

265-310 **MacFarlane, D. J.; Ridley, W. I.** An interpretation of gravity data for Teneri Canary Islands: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 481-486, illus., 1968

Machado, Federico. See *Assuncao, C. T. de. 268-229*

270-241 **Machado, Federico.** Temperature and distribution of radioactive matter in t upper mantle: Bull. Volcanol., v. 32, no. 2, p. 403-413, illus., tables, 1968.

Mack, J. E. See *Daehler, Mark. 264-049*

Mackay, Sherman. See *Campbell, David G. 268-540*

MacLaren, A. S. See *Morley, L. W. 265-458*

267-459 **MacLaren, A. S.; Charbonneau, Brian W.** Characteristics of magnetic data on major subdivisions of the Canadian Shield [with French abs.]: Geol. Assoc. Canada Proc., v. 19, p. 57-65, illus., 1968.

268-431 **MacLaren, A. S.; Charbonneau, B. W.** Aeromagnetic map—Manitoulin Island, *in* The geology of Manitoulin Island—Michigan Basin Geol. Soc., Ann. Field Excursion, 1968: [Lansing, Mich., Michigan Geol. Survey] p. 77-78, illus., 1968.

267-064 **MacLeod, W. N.** A meteorite fragment from Doolgunna Station, Meekatharra District, Western Australia: Western Australia Geol. Survey Ann. Rept., 1967, p. 68-69, illus., 1968.

265-361 **MacNeil, F. Stearns.** Rotation of the mantle—Its effects on Earth tectonics and continental drift: GeoScience News, v. 1, no. 6, p. 4-7, 17-24, illus., 1968.

272-211 **Madirazza, Ivan.** An interpretation of the Quaternary morphology in the Paarup Salt Dome area [with Danish abs.]: Dansk Geol. Foren. Medd., v. 18, pt. 2, p. 241-243, illus., 1968.

265-631 **Mádr, Ivo.** Theoretical seismograms of longitudinal pulse waves for simple model of continental Earth's crust: Československá Akad. Věd Studía Geophys. et Geod., v. 12, no. 3, p. 280-285, illus., 1968.

Mádr, Ivo. See *Cerveny, Vlastislav. 272-151*

Madsen, Beth M. See *Murata, K. J. 275-272*

265-417 **Maeda, Hiroshi; Suzuki, Akira.** Preliminary report on a practical method of analysis of the daily geomagnetic variations: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 23-27, illus., 1967.

Maenaka, Kazuaki. See *Sasajima, Sadao. 270-270*

Maenaka, Kazuaki. See *Ishida, Shiro. 274-365*

Magges, J. E. See *Belon, A. E. 268-373*

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275-312 **Magnetosphere Correspondent.** From Earth to Mars: Nature, v. 223, no. 5201, p. 17, 1969.

Maguire, J. J. See *Freeman, J. W., Jr. 265-382*

268-579 **Mahtab, M. A.; Goodman, R. E.** Stresses around wellbores in nonlinear rock: Soc. Petroleum Engineers Jour., v. 8, no. 3, p. 304-312, illus., tables, 1968.

274-444 **Mahtab, M. A.; Goodman, R. E.** Stresses around wellbores in nonlinear rock: Soc. Petroleum Engineers A.I.M.E. Trans., v. 243 (pt. 2), p. 304-312, illus., tables, reprinted 1969; originally published 1968.

Mailloux, R. See *Ewen, H. I. 270-100*

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Major, M. W. See *Romig, P. R. 275-135*

266-094 **Major, Maurice W.; Simon, Ruth B.** A seismic study of the Denver (Derby) earthquakes, *in* Geophysical and geological studies of the relationships between the Denver earthquake and the Rocky Mountain Arsenal well, Pt. A: Colorado School Mines Quart., v. 63, no. 1, p. 9-55, illus., tables, 1968.

274-115 **Major, Maurice W.; Simon, Ruth B.** A seismic study of the Denver (Derby) earthquakes: Mines Mag., v. 58, no. 6, p. 10-19, illus., tables, 1968.

273-193 **Makagonov, P. P.** Pole tokovogo kol'tsa v provodyashchey srede pri garmonicheskom i stupenchatom vozbuzhdeniyakh [The field of a current ring in a conducting medium in the case of harmonic and stepwise disturbances]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 57-71, 1969.

268-300 **Makarenko, F. A.; Polak, B. G.; Smirnov, J. B.** Geothermal field on the territory of the U.S.S.R., *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 67-73, illus., table, 1968.

270-233 **Makarenko, F. A.; Smirnov, Ya. B.; Sergiyenko, S. I.** Glubinnyy teplovoy potok i tektonicheskoye stroyeniye Predkavkaz'ya [Deep heat flow and tectonic structure of Ciscaucasia]: Akad. Nauk SSSR Doklady, v. 183, no. 4, p. 901-904, illus., table, 1968.

270-234 **Makarenko, F. A.; Polyak, B. G.; Smirnov, Ya. B.** Geotemperaturnoye pole na territorii SSSR [Geothermal field on the U.S.S.R. territory (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 43-48, illus., table, 1968.

271-558 **Makarenko, F. A.; Mavritsky, B. F.** Thermal waters of the U.S.S.R., *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Symposium 2, Genesis of mineral and thermal waters: Prague, Academia, p. 161-170, illus., 1968.

275-220 **Makarevich, K. G.; Pal'gov, N. N.; Tokmagambetov, G. A.; Vilesov, Ye N.; Sudakov, P. A.; Golovkova, R. G.; Denisova, T. Ya.; Yegorova, N. D.** Oledeneniye Zaliyskogo Alatau [Glaciation of the Zaliskiy Alatau (with English abs.)]: Akad. Nauk SSSR Mezhduvedomstv. Geofiz. Kom., Rezul'taty Issledovaniy po Mezhdunarod. Geofiz. Proyektam, 9th Razdel. Programmy MGG, Glatsiologiya, no. 23, 288 p., illus., tables, 1969.

275-172 **Makarov, K. K.; Sidorov, D. P.; Tokarev, A. S.; Korchagin, V. P.; Babayan, G. D.; Mokshantsev, K. B.** Perspektivy neftegazonosnosti Yakutskoy ASSR i plan regional'nykh geologo-geofizicheskikh rabot na neft' i gaz na 1971-1980 gg. [Oil and gas prospects of the Yakutsk A.S.S.R. and plan of regional geological and geophysical operations on oil and gas for 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 14-18, tables, 1969.

264-271 **Makarov, N. P.** Geodezicheskaya gravimetriya [Geodetic gravimetry]: Moscow, Izdatel'stvo "Nedra," 408 p., illus., tables, 1968.

Makarov, V. A. See *Yasinskaya, A. A. 273-049*

Makharadze, R. K. See *Ioseliani, M. S. 266-492*

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Maksimov, S. P. See *Pankina, R. G. 275-279*

Maksimov, V. M. See *Tarkhov, A. P. 272-272*

264-562 **Maksimov, Ye. V.** Ritmichnost' v proyavlenii vulkanicheskoy aktivnosti [Rhythmicity of manifestation of volcanic activity]: Sovetskaya Geologiya, no. 5, p. 54-70, illus., tables, 1968.

Makuvchuk, O. F. See *Shapoval, V. I. 264-408*

Malahoff, A. See *Adams, W. M. 274-210*

266-336 **Malahoff, Alexander; Moberly, Ralph, Jr.** Effects of structure on the gravity field of Wyoming: Geophysics, v. 33, no. 5, p. 781-804, illus., table, 1968.

Malahoff, Alexander. See *Rose, J. C. 268-263*

268-427 **Malahoff, Alexander.** Origin of magnetic anomalies over the central volcanic region of New Zealand, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 218-240, illus., 1968.

268-428 **Malahoff, Alexander; Woollard, George P.** Magnetic and tectonic trends over the Hawaiian ridge, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 241-276, illus., table, 1968.

Malamud, A. S. See *Kozlov, A. V. 267-134*

272-324 **Malin, S. R. C.** The effect of the sea on lunar variations of the vertical component of the geomagnetic field: Planetary and Space Sci., v. 17, no. 3, p. 487-490, tables, 1969.

274-321 **Malin, S. R. C.** Geomagnetic secular variation and its changes, 1942.5 to 1962.5: Royal Astron. Soc. Geophys. Jour., v. 17, no. 4, p. 415-441, illus., tables, 1969.

Malin, S. R. C. See *Winch, D. E. 275-316*

Malinovskaya, L. N. See *Kolesnikov, Yu. A. 266-158*

Mallick, K. See *Apparao, A. 273-172*

274-176 **Mallick, K.; Roy, Amalendu.** Resistivity sounding on a two-layer Earth with transitional boundary: Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 436-446, illus., tables, 1968.

270-432 **Maloney, Neil J.** Geomorphology of the continental margin of Venezuela—Pt. 3, Bonaire basin (66° W. to 70° W. longitude): Oriente Univ. Inst. Oceanog. Bol., v. 6, no. 2, p. 286-302, illus., table, 1967.

272-519 **Maloney, Neil J.** Geomorphology of continental margin of Venezuela—Pt. 1, Cariaco Basin [with Spanish and French abs.]: Oriente Univ. Inst. Oceanog. Bol., v. 5, nos. 1-2, p. 38-53, illus., 1966.

275-323 **Małoszewski, Stanislaw.** O mozliwosciach wykorzystania tranzystorowego magnetometru protonwego w badaniach geologicznych [On the possibility of using the transistor proton magnetometer in geological research (with English and Russian abs.)]: Przeglad Geol., v. 17, no. 4 (192), p. 195-196, 1969.

275-381 **Malovitskiy, Ya. P.; Kondrasheva, N. V.; Lutsuk, Ye. M.** Metodika kompleksnogo analiza morskikh seysmo- i elektrorazvedochnykh dannykh [Procedure of joint analysis of marine seismic and electrical survey data]: Neftegazovaya Geologiya i Geofizika, no. 3, p. 35-38, illus., 1969.

Mal'tseva, A. K. See *Mazanov, V. F. 270-510*

Mal'tseva, N. F. See *Troitskaya, V. A. 264-368*

Malyshev, V. I. See *Apel'tsin, F. R. 267-038*

275-351 **Malyshev, Yu. F.** Osobennosti kartirovaniya razryvnykh narusheniy Tsentral'no-Aldanskogo rayona po aerogeofizicheskim dannym [Features of mapping faults in the Central Aldan region on the basis of airborne geophysical data (with English summ., p. 152)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 93-101, illus., 1969.

265-299 **Mälzer, H.** Studies of relative vertical earth crustal movements in the Rhinegraben from Rastatt to Basel, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 20-23, illus., 1967.

272-290 **Mamchur, G. P.; Lazarev, I. S.** Izotopnyy sostav ugleroda v karbonatakh Gaurdakskogo mestorozhdeniya sery [The isotopic composition of carbon in the carbonates of the Gaurdak sulfur deposit]: Geokhimiya, no. 7, p. 864-866, 1968.

272-294 **Mamchur, G. P.** Izotopnyy sostav ugleroda karbonatov glinistykh serykh rud Rozdol'skogo mestorozhdeniya (Predkarpat'ye) [Isotopic composition of the carbon in the carbonates of the shaly sulfur ores of the Rozdol deposit (Cis-Carpathians) (with English summ.)]: Geokhimiya, no. 8, p. 922-929, illus., 1968.

273-328 **Mamchur, G. P.** C-12:C-13 v karbonatakh Vodinskogo mestorozhdeniya samorodnoy sery [C-12:C-13 in the carbonates of the Vodinsk deposit of native sulfur]: Akad. Nauk SSSR Izv. Ser. Geol., no. 2, p. 121-124, illus., table, 1969.

Mamchur, G. P. See *Murzayev, P. M. 274-307*

267-187 **Mamedov, R. A.** Izucheniye zemnykh tokov v Azerbaydzhane [Study of earth currents in Azerbaydzhan], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 11-12, 1967.

Mamedov, R. A. See *Faradzhev, A. S. 267-188*

Mamedov, S. A. See *Sholpo, L. Ye. 273-387*

Mamedov, S. A. See *Sholpo, L. Ye. 273-388*

273-211 **Mamiyev, A. G.** Rezul'taty regional'nykh kompleksnykh geofizicheskikh rabot provedennykh v yuzhnoy chasti Turgayskogo progiba [Results of regional combined geophysical operations conducted in the southern part of the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 6-10, illus. 1964.

272-287 **Mamyrin, B. A.; Tolstikhin, I. N.; Anufriyev, G. S.; Kamenskiy, I. L.** Anomal'nyy izotopnyy sostav geliya v vulkanicheskikh gazakh [Anomalous isotopic composition of helium in volcanic gases]: Akad. Nauk SSSR Doklady, v. 184, no. 5, p. 1197-1199, illus., table, 1969.

265-322 **Man, Otakar.** On the problem of computing derived fields in magnetic and gravity interpretation: Československá Akad. Věd Studía Geophys. et Geod., v. 12 no. 3, p. 259-279, 1968.

271-289 **Man, Otakar.** Optimum linear operators and their application in interpolating and computing derived fields in magnetometry and gravimetry: Československá Akad. Věd Studía Geophys. et Geod., v. 13, no. 1, p. 13-24, 1969.

Managadze, G. G. See *Podgornyy, I. M. 266-436*

269-413 **Managadze, G. G.; Podgornyy, I. M.; Rusanov, V. D.** Plasma flow around a two dimensional magnetic dipole: Geomagnetism and Aeronomy, v. 8, no. 3, p. 432-434, illus., table, 1968.

271-346 **Managadze, G. G.; Podgornyy, I. M.** Modeling of the interaction of the solar wind with the geomagnetic field: Geomagnetism and Aeronomy, v. 8, no. 4, p. 496-499, illus., 1968.

Managadze, G. G. See *Podgornyy, I. M. 272-352*

267-097 **Manchee, E. B.; Weichert, D. H.** Epicentral uncertainties and detection probabilities from the Yellowknife seismic array data: Seismol. Soc. America Bull., v. 58, no. 5, p. 1359-1377, illus., tables, 1968.

Mandel'baum, M. M. See *Bazanov, E. A. 275-171*

Mandel'baum, M. M. See *Savinskiy, K. A. 275-176*

271-065 **Mane, P. M.** History of earth tremors and shocks in the Koyna hydroelectric project area, in Maharashtra: Indian Geophys. Union Jour., v. 5, no. 1, p. 15-20, illus., 1968.

Manekar, A. M. See *Arora, S. K. 274-142*

268-321 **Manghnani, Murli; Woollard, George P.** Elastic wave velocities in Hawaiian rocks at pressures to ten kilobars, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 501-516, illus., tables, 1968.

266-347 **Manilov, F. I.; Solomatin, Yu. P.** O fizicheskikh svoystvakh porod Nizhnego Pobuzh'ya [On the physical properties of the rocks of the Lower Bug area (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 86-94, illus., tables, 1968.

275-242 **Manilov, F. I.** Otsenka ozhidayemoy effektivnosti gravimetrovoy i magnitnoy s''yemki pri kartirovanii dokembriyskikh porod Nizhnego Pobuzh'ya [Estimation of the expectable efficiency of gravimetric and magnetic surveying in mapping the Precambrian rocks of the Lower Bug region (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 38-46, illus., tables, 1969.

Manlard, Jean. See *Tazieff, Haroun. 269-691*

Mann, H. M. See *Weinberg, J. L. 267-394*

264-025 **Manning, John C.** Two Late Pleistocene radiocarbon dates near Buttonwillow, California, *in* Geology and oil fields, west side southern San Joaquin Valley—AAPG, SEG, and SEPM, Pacific Secs., 43d Ann. Mtg., 1968, Guidebook: [Los Angeles, Calif.] Am. Assoc. Petroleum Geologists, Pacific Sec., p. 98-99, illus., 1968.

265-100 **Mansinha, L.; Smylie, D. E.** Earthquakes and the Earth's wobble: Science, v. 161, no. 3846, p. 1127-1129, illus., table, 1968.

Mansinha, L. See *Smylie, D. E. 268-108*

Mansurova, N. D. See *Yaroshevich, M. I. 271-153*

Manuel, O. K. See *Alexander, E. C. 264-045*

Manuel, O. K. See *Alexander, E. C., Jr. 264-047*

268-033 **Manuel, O. K.; Alexander, E. C., Jr.; Roach, D. V.** I-129—Xe-129 dating of chondrites: Icarus, v. 9, no. 2, p. 291-304, illus., 1968.

Manuel, O. K. See *Alexander, E. C., Jr. 270-032*

Manuel, O. K. See *Alexander, E. C., Jr. 270-039*

270-239 **Mao, Ho-Kwang; Takahashi, Taro; Bassett, William A.; Weaver, J. Scott.** Effect of pressure and temperature on the molar volumes of wüstite and of three $(Fe,Mg)_2SiO_4$ spinel solid solutions: Jour. Geophys. Research, v. 74, no. 4, p. 1061-1069, illus., tables, 1969.

Marangunic, Cedomir. See *Bull, Colin. 270-062*

270-067 **Marangunic, Cedomir; Bull, Colin.** The landslide on the Sherman Glacier, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 383-394, illus., 1968.

Marcelli, L. See *Feliziani, P. 265-115*

Marcelli, L. See *Feliziani, P. 265-121*

272-536 **Marchant, L. C.; White, E. J.** Comparison of log and core analysis results for an extremely heterogeneous carbonate reservoir, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. L1-L16, illus., tables, 1968.

274-414 **Marchenko, V. V.** Primeneniye radiometrii dlya pryamykh poiskov nefti [Use of radiometry for direct prospecting for oil], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 74-79, 1964.

266-074 **Marcus, Allan.** Comments on "Distribution of craters on the lunar surface": Royal Astron. Soc. Monthly Notices, v. 134, no. 3, p. 269-274, illus., 1966.

270-051 **Marcus, Allan.** Comments on "Distribution of craters on the lunar surface" [by G. Fielder, 1965]: Royal Astron. Soc. Monthly Notices, v. 134, no. 3, p. 269-274, illus., 1966.

Marcus, Leslie F. See *Ho, T. Y. 274-001*

270-064 **Marcus, Melvin G.** Effects on glacier-dammed lakes in the Chugach and Kenai Mountains, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 329-347, illus., tables, 1968.

264-186 **Marderfel'd, B. Ye.; Lyapishev, A. M.; Gritsuk, V. P.** Nekotoryye zakonomernosti v raspredelenii vertikal'noy sostavlyayushchey geomagnitnykh variatsiy pri beregovom effekte [Some regularities in distribution of the vertical components of geomagnetic variations in the case of the coastal effect]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 117-119, illus., 1968.

Marderfel'd, B. Ye. See *Van'yan, L. L. 264-187*

Marderfel'd, B. Ye. See *Van'yan, L. L. 271-348*

Marderfel'd, B. Ye. See *Van'yan, L. L. 275-164*

273-460 **Marek, Franitšek.** K opredeleniyu zakona izmeneniya skorosti c glubinoy v seysmicheskoy razvedke [On determination of the law of velocity change with depth in seismic prospecting (with Czech abs.)]: Carolina Univ. Acta—Geologica 1968, no. 3, p. 217-228, illus., tables, 1968.

273-461 **Marek, František.** Opredeleniye popravok effektivnykh skorostey za krivolineynost' seysmicheskikh lychey [Determination of corrections of effective velocities from curvature of seismic waves (with Czech abs.)]: Carolina Univ. Acta—Geologica 1968, no. 3, p. 229-235, illus., 1968.

267-631 **Marenkov, O. S.** Matematicheskoye modelirovaniye gamma-perenosa v zadachakh teorii selektivnogo karotazha [Mathematical modeling of gamma-transfer in problems of the theory of selective logging]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 107-111, illus., table, 1968.

Mareš, Stanislav. See *Maxant, Josef. 274-493*

Márhoffer, József. See *Deres, Janos. 275-436*

265-413 **Mariani, F.** Results on magnetic field inside and outside the magnetosphere: Annali Geofisica, v. 19, no. 2, p. 215-242, illus., 1966.

265-414 **Mariani, F.; Molina, F.** Perturbazioni geomagnetiche, aurorali, ionosferiche e dei raggi cosmica—Interdipendenze e relazioni con l'attivita solare. 5. Stato fisico dello spazio interplanetario [Geomagnetic, auroral, ionospheric and cosmic ray perturbations—Interdependence and relations with solar activity—(Pt.) 5, Physical state of interplanetary space (with English summ.)]: Annali Geofisica, v. 19, no. 3, p. 287-334, illus., 1966.

264-024 **Marjaniemi, Darwin.** Tertiary volcanism in the northern Chiricahua Mountains, Cochise County, Arizona, *in* Southern Arizona Guidebook 3—Geol. Soc. America Cordilleran Sec., 64th Ann. Mtg., Tucson, 1968: Tucson, Ariz., Arizona Geol. Soc., p. 209-214, illus., tables, 1968.

268-316 **Markhinin, E. K.** Volcanism as an agent of formation of the Earth's crust, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 413-422, illus., tables, 1968.

269-151 **Markov, M. S.; Sukhanov, A. L.; Trifonov, V. G.; Florenskiy, P. V.** Geological and morphological mapping of the Moon and the structure of the lunar surface, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 111-117, 1968.

271-213 **Markov, M. S.** K probleme stanovleniya "granitnogo" sloya ostrovnykh dug [On the problem of the existence of a granitic layer in island arcs (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 181-186, table, 1968.

Markova, N. G. See *Vinogradov, A. P. 265-027*

Markova, N. G. See *Vinogradov, A. P. 265-028*

271-205 **Markova, N. G.** Tektonicheskaya priroda i tip vulkanicheskikh poyasov (na primere Tsentral'nogo Kazakhstana i Vostoka SSSR) [Tectonic nature and type of volcanic belts (illustrated by Central Kazakhstan and the East of the U.S.S.R. (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 37-43, illus., 1968.

Markova, N. G. See *Devirts, A. L. 272-035*

Markovskiy, V. M. See *Safarov, I. P. 264-596*

266-259 **Markowitz, William.** Third Symposium on Recent Crustal Movements: Am. Geophys. Union Trans., v. 49, no. 3, p. 556-557, 1968.

266-299 **Markowitz, William; Guinot, B.** (editors). Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, 107 p., illus., tables, 1968.

266-301 **Markowitz, William.** Concurrent astronomical observations for studying continental drift, polar motion, and the rotation of the Earth [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron.

Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 25-32, illus., tables, 1968.

Markushevich, V. M. See *Gerver, M. L. 266-194*

266-195 **Markushevich, V. M.** Kharakteristicheskiye svoystva godografa ot glubinnogo istochnika [Characteristic properties of a traveltime curve from a deep source], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 64-77, 1968.

Markushevich, V. M. See *Gerver, M. L. 271-097*

Marmo, V. See *Puranen, M. 268-436*

264-299 **Marmo, Vladi.** Remarks on the paper "A geobarometer for certain migmatites" by R. V. Dietrich [1967]: Finlande Comm. Geol. Bull., no. 229, p. 11-15, illus., 1967.

Marmorshteyn, L. M. See *Volarovich, M. P. 265-264*

270-156 **Marmorshteyn, L. M.; Petukhov, I. M.** Issledovaniye elektroprovodnosti, poristosti i pronitsayemosti gornykh porod v usloviyakh, blizikh k plastovym [Investigation of the electrical conductivity, porosity, and permeability of rocks in conditions similar to formational], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 184-192, illus., table, 1968.

275-083 **Marov, M. Ya.** Atmosfera planety Venera [The atmosphere of the planet Venus]: Akad. Nauk SSSR Vestnik, no. 5, p. 72-81, illus., 1969.

Marsh, Phyllis S. See *Stearns, Richard G. 273-074*

Marshall, B. Vaughn. See *Lachenbruch, Arthur H. 266-359*

264-093 **Marshall, G. E.; Stephens, J. R.** Observations of earth-tilt and earthquake correlation, Denver area, Colorado: Earthquake Notes, v. 39, nos. 1-2, p. 23-36, illus., table, 1968.

Marshall, P. D. See *Grover, F. H. 273-121*

265-081 **Marshall, Royal R.** Lead-lead age of the Bondoc meteorite: Geochim. et Cosmochim. Acta, v. 32, no. 9, p. 1013-1018, tables, 1968.

271-018 **Marsters, Beverly; Spiker, Elliott; Rubin, Meyer.** U.S. Geological Survey radiocarbon dates X: Radiocarbon, v. 11, no. 1, p. 210-227, 1969.

Marti, Kurt. See *Urey, Harold C. 264-071*

Martin, G. See *Leveque, P. 271-514*

270-415 **Martin, G. R.** The dynamic response of cohesive earth dams to earthquakes, *in* Australia-New Zealand Conf. on Soil Mechanics and Found. Eng., 5th, Auckland, New Zealand, 1967, Proc.: Petone, New Zealand, Sigma Press, Ltd., p. 121-131, illus., 1967.

271-004 **Martin, J. R.; Goodell, H. G.** Florida State University radiocarbon dates III: Radiocarbon, v. 11, no. 1, p. 15-21, 1969.

267-107 **Martin, O. L., Jr.** Underwater disturbances, *in* Science and the sea: Washington, D. C., U.S. Naval Oceanographic Office, p. 53-60, illus., 1967.

Martin, R. J., 3d. See *Brace, W. F. 266-540*

275-431 **Martini, Marino.** Studio di prodotti fumarolici di alcuni vulcani della catena dell' Erta Ale (Etiopia) [Study of fumarolic products of some volcanoes of the Erta Ale ridge (Ethiopia) (with English and French abs.)]: Soc. Italiana Mineralogia e Petrologia Rend., v. 25, pt. 1, p. 79-92, illus., tables, 1969.

Márton, P. See *Bisztricsany, Ede. 274-214*

270-276 **Márton, Péter; Szalay, Emő.** Cserhát-hegységi andezitek áttekintő paleomágneses vizsgálata [Paleomagnetic investigation of the andesites of the Cserhat Mountains (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 6, p. 224-230, illus., tables, 1968.

264-338 **Martyn, D. F.** Conductivity and resistivity in skew conductors: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 91-92, 1968.

Martynenko, A. I. See *Timoshin, Yu. V. 266-522*

Martynova, K. V. See *Zagulyayeva, V. A. 264-357*

266-222 **Maruffi, G.** Studio geofisico della colata leucititica a Cività Castellana [Geophysical study of the leucitite flow at Cività Castellana (with English summ.)]: Annali Geofisica, v. 20, no. 2, p. 171-182, illus., tables, 1967.

264-575 **Marušiak, I.; Těžký, A.; Jonášová, V.** Printsip kontroliruyemogo regulirovaniya toka mnogoelektrodnykh karotazhnykh zondov [Principle of control regulation of current of multielectrode logging sondes]: Prikladnaya Geofizika, no. 51, p. 145-155, illus., 1968.

268-629 **Marušiak, Ivan; Mašek, K.** Vliyaniye nenulevogo regulirovaniya na pokazaniya semielektrodnogo bokovogo karotazha [Effect of nonzero tuning on the readings of semielectrode lateral logging]: Prikladnaya Geofizika, no. 52, p. 160-168, illus., table, 1968.

Marvin, Richard F. See *Dickinson, Robert G. 267-009*

Mar'yashina, D. A. See *Yegorov, Yu. M. 267-174*

Mašek, K. See *Marusiak, Ivan. 268-629*

Masenthin, H. W. See *Moore, R. K. 270-115*

Mashkovich, K. A. See *Kolesnik, A. P. 269-277*

264-150 **Mashrykov, K. K.; Nepesov, R. D.; Kurbanov, M.** Osnovnyye napravleniya v izuchenii seysmichnosti i sovremmennykh dvizheniy zemnoy kory na territorii Turkmenii [Main trends in the study of the seismicity and recent movements of the Earth's crust on the territory of Turkmenia]: Akad. Nauk Turkmen. SSR Izv. Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 6, p. 50-57, 1967.

268-281 **Maslov, I. A.; Naumenko-Bondarenko, I. I.** Vliyaniye volneniya morya na pokazaniya donnogo gravimetra [Effect of swell on the readings of a bottom gravimeter]: Prikladnaya Geofizika, no. 53, p. 112-119, illus., table, 1968.

Mason, Brian. See *Jarosewich, Eugene. 274-035*

Mason, Brian. See *Faust, George T. 275-035*

271-044 **Mason, Curtis C.** Particle size distribution of lunar surface material: Geol. Soc. America Bull., v. 80, no. 4, p. 587-594, illus., tables, 1969.

Mason, R. G. See *Watkins, N. D. 267-438*

Mason, Robert. See *Crockett, Richard N. 267-311*

Massey, Norman G. See *Porcello, Leonard J. 270-042*

264-288 **Masuda, Akimasa.** Nature of the experimental Mohole basalt—Redetermination of lanthanides: Jour. Geophys. Research, v. 73, no. 16, p. 5425-5428, illus., tables, 1968.

267-056 **Masuda, Akimasa.** Lanthanide concentrations in the olivine phase of the Brenham pallasite: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 59-62, illus., 1968.

275-047 **Masuda, Akimasa.** Lanthanides in the Norton County achondrite: Geochem. Jour., v. 2, nos. 3-4, p. 111-135, illus., tables, 1968.

Masursky, H. See *Gault, D. E. 268-084*

Masursky, H. See *Gault, D. E. 275-077*

268-070 **Masursky, Harold.** Lunar-exploration targets: Astronautics and Aeronautics, v. 7, no. 1, p. 42-49, illus., 1969.

Masursky, Harold. See *Howard, Keith A. 269-116*

268-175 **Matalucci, Rudolph V.; Abdel-Hady, Mohamed.** Infrared aerial surveys in environmental engineering: Am. Soc. Civil Engineers Proc., v. 94, paper 6277, Jour. Sanitary Eng. Div., no. SA 6, p. 1071-1084, illus., 1968.

Mather, K. B. See *Belon, A. E. 268-373*

271-159 **Mather, R. S.** The free air geoid as a solution of the boundary value problem: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 515-530, illus., 1968.

271-160 **Mather, R. S.** The formula for normal gravity in geodetic calculations: Survey Rev., v. 19, no. 150, p. 341-348, tables, 1968.

Mather, T. T. See *Goodell, H. G. 267-437*

Mathieu, Guy. See *vanDonk, Jan. 274-294*

265-262 **Mathis, Sérge.** Étude de la pénétration des perturbations électromagnétiques naturelles sous les oceans au moyen de réseaux analogiques a résistances et capacités [Study of the penetration of natural electromagnetic perturbations under the oceans by means of circuits similar to resistances and capacitances]: Acad. Sci. Comptes Rendus, ser. B, v. 265, no. 15, p. 830-832, illus., 1967.

Mathur, B. K. See *Qureshy, M. N. 268-264*

Matoshin, V. M. See *Averko, Ye. M. 270-535*

Matoshin, V. M. See *Averko, Ye. M. 275-456*

275-046 **Matsuda, Hideki; Horie, Kinuko; Honda, Masatake.** Some cosmic ray produced radioactivities in the Norton County achondrite and the Peace River chondrite: Geochem. Jour., v. 2, nos. 3-4, p. 167-174, tables, 1968.

Matsuda, Iware. See *Nakano, Takamasa. 265-301*

269-336 **Matsuda, Takeo; Suda, Yoshiro.** Bouguer anomaly maps in Japan: Japan Geol Survey Rept., no. 209, scale 1:500,000, text, 1964.

Matsumoto, Eiji. See *Miyake, Yasuo. 270-019*

Matsumoto, H. See *Forbes, Robert B. 270-435*

Matsumoto, Shigeo. See *Kasahara, Keichi. 266-134*

Matsumoto, Shigeo. See *Shibano, Mutsuro. 266-137*

Matsumoto, Shigeo. See *Kasahara, Keichi. 266-138*

Matsumoto, T. See *Hayakawa, S. 268-056*

273-017 **Matsumoto, Tatsuro; Yamaguchi, Masaru; Yanagi, Takeru; Matsushita, Susumu; Hayase, Ichikazu; Ishizaka, Kyoichi; Kawano, Yoshinori; Ueda, Yoshio.** The Precambrian problem in younger orogenic zones—An example from Japan, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 643-648, illus., tables, 1968.

265-152 **Matsushima, Shogo.** Water content in the crust and the hydrothermal reaction as a possible cause for the swarm-type earthquake: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 201-210, illus., 1967.

264-340 **Matsushita, S.** Sq and L current systems in the ionosphere: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 109-125, illus., tables, 1968.

Matsushita, Susumu. See *Matsumoto, Tatsuro. 273-017*

Matsuyama, Tsutomu. See *Kano, Hiroshi. 265-140*

268-425 **Matsuzaki, Takuichi; Utashiro, Shinkichi.** Airborne and shipboard magnetic surveys in the western Pacific Ocean and Sea of Japan, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 198-211, illus., 1968.

Mattern, P. L. See *Zeller, E. J. 269-055*

264-213 **Matthews, D. H.; Williams, C. A.** Linear magnetic anomalies in the Bay of Biscay—A qualitative interpretation: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 315-320, illus., 1968.

265-109 **Matthews, Robert A.** Geologic hazards of Lake Tahoe Basin area, *in* Geologic studies of the Lake Tahoe area—Geol. Soc. Sacramento, Ann. Field Trip Guidebook, 1968: Sacramento, Calif., Geol. Soc. Sacramento, p. 14-26, illus., 1968.

269-604 **Mattick, Robert E.** Seismic-refraction profiles across six canyons in the Wasatch Range near Salt Lake City, Utah, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D255-D257, illus., 1968.

Mattick, Robert E. See *Behrendt, John C. 275-227*

Matumoto, T. See *P. L. 266-555*

Matusevich, Yu. F. See *Priyma, V. I. 266-516*

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Matveyenko, A. A. See *Avchyan, G. M. 267-151*

Matveyenko, A. A. See *Avchyan, G. M. 268-167*

266-171 **Matveyev, P. S.; Bogdan, I. D.; Lysenko, G. M.** Naklonomernyye nablyudeniya v Velikikh Budishchakh [Tiltmeter observations at Velika Budishcha (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 197-202, illus., tables, 1967.

268-568 **Matveyev, V. G.; Konovalov, M. M.; Nikitina, N. V.; Ivanov, I. I.** Analiz izmeneniya skorosti rasprostraneniya uprugikh voln v otlozheniyakh Yuzhnogo Mangyshlaka [Analysis of variations in elastic wave velocities in the formations of the Southern Mangyshlak]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 4, p. 21-30, illus., tables, 1968.

Matveyev, V. S. See *Brodovoy, V. V. 268-195*

Matveyeva, E. T. See *Plyasova-Bakunina, T. A. 264-383*

Matveyeva, E. T. See *Plyasova-Bakunina, T. A. 267-418*

269-415 **Matveyeva, E. T.; Troitskaya, V. A.** Preliminary analysis of micropulsations of the electromagnetic field of the Earth associated with the proton flare of July 7, 1966: Geomagnetism and Aeronomy, v. 8, no. 3, p. 480-482, illus., tables, 1968.

272-327 **Matveyeva, E. T.; Troitskaya, V. A.** Preliminary analysis of micropulsations of the Earth's electromagnetic field in connection with the proton flare of 7 July 1966, *in* Annals of the IQSY—V. 3, The proton flare project (the July 1966 event): Cambridge, Mass., and London, England, M. I. T. Press, p. 408-412, illus., tables, 1969.

273-368 **Matveyeva, E. T.; Gnevyshev, M. N.; Troitskaya, V. A.** Relationship between 11-year cyclic variations in pulsations of the pearly type (Pcl) and solar activity: Geomagnetism and Aeronomy, v. 8, no. 5, p. 783-784, illus., 1968.

Matveyeva, E. T. See *Troitskaya, V. A. 273-369*

Matveyeva, I. I. See *Gerling, E. K. 275-026*

266-142 **Matveyeva, N. N.; Lukk, A. A.** Otsenka tochnosti postroyeniya godografov Pamiro-Gindukushskoy zony i mashinnyy poisk skorostnogo razreza verkhney mantii [Estimation of the accuracy of plotting traveltime curves for the Pamir-Hindu Kush zone and computer search for the velocity section of the upper mantle]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 12-24, illus., tables, 1968.

Matveyey, V. S. See *Brodovoy, V. V. 269-279*

269-656 **Matviyenko, A. I.** Shapkinsko-Yur'yakhinskiy val—Novaya zona neftegazonakopleniya na severe Timano-Pechorskoy provintsii [The Shapka-Yur'yakha swell—A new zone of oil and gas accumulation on the north of the Timan-Pechora province]: Neftegazovaya Geologiya i Geofizika, no. 9, p. 3-5, illus., 1968.

265-342 **Matviyenko, V. N.** Rezul'taty geotermicheskikh issledovaniy na Kubani [Results of geothermal investigations on the Kuban]: Geologiya Nefti i Gaza, no. 8, p. 35-38, 1968.

274-373 **Mauersberger, Peter.** Naherungsdarstellen fur das magnetostatische Feld eines parametrischen Storkorpers beliebiger Gestalt [Approximate representations for the magnetostatic field of a parametric disturbing body of arbitrary shape (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 161-172, 1969.

264-021 **Mauger, Richard L.** A summary of isotopic ages of Colorado Plateau, Utah, mineral deposits, *in* Uranium districts of southeastern Utah: Utah Geol. Soc. Guidebook to Geology of Utah, no. 21, p. 91-98, illus., tables, 1967.

Mauger, Richard L. See *Damon, Paul E. 267-030*

Mauger, Richard L. See *Damon, Paul E. 269-072*

264-013 **Maugher, Richard L.; Damon, Paul E.; Livingston, Donald E.** Cenozoic argon ages from metamorphic rocks from the Basin and Range province: Am. Jour. Sci., v. 266, no. 7, p. 579-589, illus., table, 1968.

Maurette, M. See *Cantelaube, Y. 269-100*

274-446 **Maurino, Victor E.** Contribución de la geología a la mecánica de rocas [Contribution of geology to rock mechanics]: Ingeniería Forestal, v. 1, no. 3, p. 31-36, illus., tables, 1969.

272-368 **Mäussnest, Otto.** Magnetische Untersuchungen im Gebiet des Schwäbischen Vulkans [Magnetic investigations in the region of the Swabian volcano (with English, French, and Russian summ.)]: Geol. Rundschau, v. 58, no. 2, p. 512-520, illus., tables, 1969.

270-073 **Mavlyanov, G.; Ulomov, V.** The Tashkent earthquake: Sci. Jour., v. 4, no. 6, p. 75-80, illus., 1968.

264-155 **Mavlyanov, G. A.; Ibragimov, R. N.; Ulomov, V. I.** Sostoyaniye makroseysmicheskikh issledovaniya v Uzbekistana i dal'neysheye razvitiye [The state of macroseismic investigations in Uzbekistan and future development]: Uzbek. Geol. Zhur., no. 2, p. 67-69, 1968.

266-329 **Mavlyanov, G. A.; Tetyukhin, G. F.** Sovremennyye tektonicheskiye dvizheniya v Kyzylkumakh [Recent tectonic movements in the Kyzyl Kums]: Uzbek. Geol. Zhur., no. 2, p. 88-89, 1966.

264-232 **Mavlyanov, T. A.; Tetyukhin, G. F.; Arehanbekov, Sh. U.; Rayzman, A. P.** O sovremennykh tektonicheskikh dvizheniyakh v Tsentral'nykh Kyzylkumakh [On recent tectonic movements in the central Kyzyl Kums]: Uzbek. Geol. Zhur., no. 2, p. 3-10, illus., 1968.

Mavritsky, B. F. See *Makarenko, F. A. 271-558*

274-493 **Maxant, Josef; Mareš, Stanislav.** Korelace devonských vápenců v Barrandienu podle elektrokarotáže [Correlation of Devonian limestones in the Barradian based on resistivity logs (with English summ.)]: [Czechoslovakia] Ústřed. Ústav. Geol. Věstnнk, v. 43, no. 6, p. 405-414, illus., tables, 1968.

266-057 **Maxim, Ion Al.** Meteorįti şi materiale meteoritice din România-Notă preliminară la Catalogul meteoriţilor din Romania [Meteorites and meteoritic materials in Rumania—Preliminary note to the "Meteorite catalog of Rumania" (with English and Russian abs.)]: Babeş-Bolyai Univ. Studia, Ser. Geologia-Geographia, pt. 1, p. 3-6, illus., 1968.

267-034 **Maxwell, W. G. H.** Relict sediments, Queensland continental shelf: Australian Jour. Sci., v. 31, no. 3, p. 85-86, 1968.

May, B. T. See *Farrell, W. E. 271-360*

268-360 **May, F.** (and others). Modellversuche uber Isotopenfraktionierung von Erdgaskomponenten wahrend der Migration [Model experiment on isotopic fractionation of natural gas components during migration (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 7, p. 376-380, illus., tables, 1968.

268-266 **May, P. R.** Gravimetric estimation of depth to aquifers in the Hazeva area, Arava Valley, Israel: Israel Jour. Earth-Sci., v. 17, no. 1, p. 30-43, illus., 1968.

267-406 **Mayaud, P. N.** Calcul preliminaire d'indices Km, Kn et Ks ou am, an et as, mesures de l'activité magnetique a l'échelle mondiale et dans les hemisphères Nord et Sud [Preliminary calculation of indexes Km, Kn and Ks or am, an and as, measures of magnetic activity on a world scale and in the North and South Hemispheres (with English abs.)]: Annales Géophysique, v. 23, no. 4, p. 585-617, illus., tables, 1967.

Mayaud, Pierre-Noël. See *Gouin, Pierre. 272-340*

Mayewski, Paul A. See *Hodge, Dennis S. 271-267*

268-542 **Mayne, W. Harry.** Punto de reflexion comúm.—Técnica de apilar datos horizontales [Point of common reflection—Technique of horizontal data stacking]: Asoc. Mexicana Geofísicos Explor. Bol., v. 7, no. 4, p. 205-221, illus., 1966.

270-392 **Mayorov, V. V.; Kaplan, B. L.; Gorbacheva, N. P.; Ivanchuk, A. M.; Brodov, L. Yu.; Dement'yev, V. A.** Vliyaniye svoystv vzrychatykh veshchestv na parametry uprugoy volny pri vzryvakh v gruntakh [Effect of the properties of the explosive material on the parameters of the elastic waves in the case of explosions in soils]: Razved. Geofizika, no. 29, p. 55-65, illus., tables, 1968.

Mayorova, S. N. See *Ipatenko, S. P. 269-701*

264-320 **Mayr, H. G.; Volland, H.** Model of magnetospheric temperature distribution: Jour. Geophys. Research, v. 73, no. 15, p. 4851-4858, illus., 1968.

Mays, R. E. See *Lee, Donald E. 269-009*

Maysuradze, O. M. See *Tskhakaya, A. D. 265-166*

266-163 **Maysuradze, O. M.** Adzgara (Čhaltha)-Ptišis raionši 1963 c̮els momḫdar micisdwrebis analizi [Analysis of earthquakes in the Adzgaro (Čhaltho)-Ptishs region in 1963 (in Georgic with Russian summ.)]: Akad. Nauk Gruzin. SSR Ins Geofiziki Trudy, v. 24, no. 1, p. 28-42, illus., 1966.

270-510 **Mazanov, V. F.; Mal'tseva, A. K.** O vozraste verkhney chasti terrigennykh otlozheniy yury Chardzhouskoy stupeni Amudar'inskoy vpadiny [On the age of the upper part of the Jurassic continental formations of the Chardzhou step of the Amu Darya basin]: Akad. Nauk SSSR Doklady, v. 183, no. 2, p. 412-415, illus., 1968.

266-027 **Mazess, R. B.; Zimmerman, D. W.** Thermoluminescence dating of some Peruvia pottery, Chap. 7.10 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academi Press, p. 445-448, illus., table, 1968.

Mazor, E. See *Heymann, D. 269-102*

Mazor, E. See *Gat, Joel R. 274-298*

Mazor, Emanuel. See *Heymann, Dieter. 270-026*

Mazumdar, K. See *Nair, M. Ramachandran. 272-167*

274-454 **McAlinden, John M.; Orlin, Hyman.** Mapping our new sea frontier: Surveyin and Mapping, v. 29, no. 1, p. 71-86, illus., 1969.

McBirney, Alexander R. See *Gomberg, David N. 265-005*

275-424 **McBirney, Alexander R.** Compositional variations of the climactic eruption Mount Mazama, *in* Andesite conference guidebook—Internat. Upper Mantle Pro Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Industries Bull. 62, p. 53-56, illus., table, 1968.

275-427 **McBirney, Alexander R.** Petrochemistry of the Cascade andesite volcanoes, Andesite conference guidebook—Internat. Upper Mantle Proj. Sci. Rept. 16- Oregon Dept. Geology and Mineral Industries Bull. 62, p. 101-107, illus., table 1968.

267-089 **McCall, J.** What have the probes told us,, *in* Interpretation of lunar probe data- AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Cali American Astronautical Soc. (Science and Technology Series, V. 14), p. 166-176, lus., 1967.

265-019 **McCallum, K. J.; Wittenberg, J.** University of Saskatchewan radiocarbon dat V: Radiocarbon, v. 10, no. 2, p. 365-378, 1968.

McCann, D. M. See *Buchan, S. 264-535*

McCarthy, J. G. See *Lovering, T. S. 275-295*

McCarthy, J. Howard,. See *Lovering, T. S. 266-415*

268-074 **McCauley, John F.** Geologic results from the lunar precursor probes: AIA Jour., v. 6, no. 10, p. 1991-1996, illus., 1968.

269-139 **McCauley, John F.** Moon probes: Morristown, N. J., Silver Burdett Co., 64 p., lus., 1969.

274-055 **McCauley, John F.** Geologic map of the Alphonsus GA region of the Moon: U.S. Geol. Survey Misc. Geol. Inv. Map I-586 (RLC 15), text, 1969.

264-549 **McClaine, L. A.; Allen, R. V.; McConnell, R. K., Jr.; Surprenant, N. F.** Volcanic smoke clouds: Jour. Geophys. Research, v. 73, no. 16, p. 5235-5246, illus., table, 1968.

McColl, D. H. See *Johnson, J. E. 272-062*

McComas, Murray R. See *Cartwright, Keros. 267-160*

270-021 **McConnell, Duncan.** Discovery of the garnet, khoharite,: Science, v. 163, no. 3869, p. 828-829, 1969.

McConnell, R. B. See *Snelling, N. J. 275-013*

275-232 **McConnell, R. B.; Smith, D.; Berrange, J. P.** Geological and geophysical evidence for a rift valley in the Guyana Shield: Geologie en Mijnbouw, v. 48, no. 2, p. 189-200, illus., 1969.

McConnell, R. K., Jr. See *McClaine, L. A. 264-549*

268-577 **McConnell, R. K., Jr.; Simon, Ivan.** *In situ* stress measurements from tilts induced by mining operations: Soc. Mining Engineers Trans., v. 241, no. 3, p. 311-313, illus., 1968.

267-309 **McConnell, Robert K., Jr.** Viscosity of the mantle from relaxation time spectra of isostatic adjustment: Jour. Geophys. Research, v. 73, no. 22, p. 7089-7105, illus., 1968.

269-364 **McConnell, Robert K., Jr.** Viscosity of the Earth's mantle, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 45-57, illus., discussion, 1968.

270-046 **McCord, Thomas B.; Adams, John B.** Spectral reflectivity of Mars: Science, v. 163, no. 3871, p. 1058-1060, illus., 1969.

273-106 **McCord, Thomas B.** Comparison of the reflectivity and color of bright and dark regions on the surface of Mars: Astrophys. Jour., v. 156, no. 1, pt. 1, p. 79-86, 1969.

274-063 **McCord, Thomas B.** Time dependence of lunar differential color: Astron. Jour., v. 74, no. 2, p. 273-278, illus., 1969.

McCorkell, Robert H. See *Comerford, Matthias F. 270-033*

272-539 **McCulloh, T. H.; Kandle, J. R.; Schoellhamer, J. E.** Application of gravity measurements in wells to problems of reservoir evaluation, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. O1-O29, illus., table, 1968.

McCullough, T. P. See *Hobbs, R. W. 268-057*

268-364 **McDiarmid, I. B.; Wilson, Margaret D.** Dependence of the high latitude electron (E>35 kev) boundary on the orientation of the geomagnetic axis: Jour. Geophys. Research, v. 73, no. 23, p. 7237-7244, illus., 1968.

270-003 **McDonald, Barrie C.** Deglaciation and differential postglacial rebound in the Appalachian region of southeastern Quebec: Jour. Geology, v. 76, no. 6, p. 664-677, illus., table, 1968.

274-138 **McDonald, John A.; Goforth, Tom T.** Seismic effects of sonic booms—Empirical results: Jour. Geophys. Research, v. 74, no. 10, p. 2637-2647, illus., table, 1969.

275-310 **McDonald, Keith L.; Gunst, Robert H.** An analysis of the Earth's magnetic field from 1835 to 1965: U.S. ESSA Tech. Rept., IER 46-IES 1, 87 p., illus., tables, 1967.

274-453 **McDonald, Martin F.; Katz, Eli Joel.** Quantitative method for describing the regional topography of the ocean floor: Jour. Geophys. Research, v. 74, no. 10, p. 2597-2607, illus., table, 1969.

273-308 **McDougall, David J.** Discussion of a note by J. M. Waite entitled "Anomalies in the thermoluminescence of the Austin Chalk of Texas": Jour. Sed. Petrology, v. 39, no. 1, p. 395, 1969.

McDougall, I. See *Webb, A. W. 266-040*

McDougall, I. See *Stipp, J. J. 267-033*

McDougall, I. See *Dury, G. H. 274-018*

264-027 **McDougall, Ian; Stipp, J. J.** Isotopic dating evidence for the age of climatic deterioration and the Pliocene-Pleistocene boundary: Nature, v. 219, no. 5149, p. 51-53, 1968.

267-021 **McDougall, Ian.** Isotopic dating of the Roraima dolerites: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 141-145, table, 1968.

McDougall, Ian. See *Webb, A. W. 273-034*

McDougall, Ian. See *Devereux, I. 274-019*

McDougall, Ian. See *Stipp, J. J. 274-020*

275-004 **McDougall, Ian; Chamaulaun, F. H.** Isotopic dating and geomagnetic polarity studies on volcanic rocks from Mauritius, Indian Ocean: Geol. Soc. America Bull., v. 80, no. 8, p. 1419-1442, illus., tables, 1969.

275-007 **McDowell, L. L.; Ryan, M. E.** Radiocarbon dating by liquid scintillation spectrometry—Synthesis of benzene ($\text{C-14}_6\text{H}_6$): Beltsville, Md., U.S. Dept. Agriculture, Agr. Research Service (ARS 41-88), 19 p., illus., 1964.

266-452 **McElhinny, M. W.** Palaeomagnetic directions and pole positions—[Pt.] 8, Pole numbers 8/1 to 8/186: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 409-430, table, 1968.

267-440 **McElhinny, M. W.** Palaeomagnetic directions and pole positions—[Pt.] 9, Pole numbers 9/1 to 9/159: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 207-224, table, 1968.

272-355 **McElhinny, M. W.; Evans, M. E.** An investigation of the strength of the geomagnetic field in the early Precambrian: Physics Earth and Planetary Interiors, v. 1. no. 7, p. 485-497, illus., tables, 1968.

McElroy, John D. See *Browning, David G. 266-175*

268-040 **McElroy, Michael B.** Structure of the Venus and Mars atmospheres: Jour Geophys. Research, v. 74, no. 1, p. 29-41, illus., tables, 1969.

270-043 **McElroy, Michael B.; Strobel, Darrell F.** Models for the nighttime Venus iono sphere: Jour. Geophys. Research, v. 74, no. 5, p. 1118-1127, illus., tables, 1969.

271-042 **McElroy, Michael B.; Hunten, Donald M.** The ratio of deuterium to hydrogen i the Venus atmosphere: Jour. Geophys. Research, v. 74, no. 7, p. 1720-1739, illus tables, 1969.

267-223 **McEvilly, T. V.** Sea floor mechanics north of Cape Mendocino, California: Na ture, v. 220, no. 5170, p. 901-903, illus., 1968.

McEvilly, T. V. See *Bolt, B. A. 269-182*

267-221 **McFadden, C. P.; Smylie, D. E.** Effect of a region of low viscosity on thermal convection in the mantle: Nature, v. 220, no. 5166, p. 468-469, illus., 1968.

264-091 **McGarr, Arthur; Vorhis, Robert C.** Seismic seiches from the March 1964 Alaska earthquake: U.S. Geol. Survey Prof. Paper 544-E, p. E1-E43, illus., tables, 1968.

275-097 **McGarr, Arthur.** Amplitude variations of Rayleigh waves—Propagation across a continental margin: Seismol. Soc. America Bull., v. 59, no. 3, p. 1281-1305, illus., tables, 1969.

275-098 **McGarr, Arthur.** Amplitude variations of Rayleigh waves—Horizontal refraction: Seismol. Soc. America Bull., v. 59, no. 3, p. 1307-1334, illus., tables, 1969.

275-092 **McGinley, John R., Jr.; Anderson, Don L.** Relative amplitudes of P and S waves as a mantle reconnaissance tool: Seismol. Soc. America Bull., v. 59, no. 3, p. 1189-1200, illus., tables, 1969.

266-065 **McGovern, Wayne E.** Exospheric temperatures of Jupiter and Saturn: Jour. Geophys. Research, v. 73, no. 19, p. 6361-6363, table, 1968.

266-066 **McGovern, Wayne E.** Further examination of the hydrogen content in the upper atmosphere of Venus: Jour. Geophys. Research, v. 73, no. 19, p. 6364-6365, 1968.

267-458 **McGrath, P. H.** An interpretation of the Miramichi Bay magnetic anomaly, New Brunswick: Maritime Sediments, v. 4, no. 1, p. 11-13, illus., 1968.

272-381 **McGrath, Peter H.; Hall, Donald H.** Crustal structure in northwestern Ontario—Regional magnetic anomalies: Canadian Jour. Earth Sci., v. 6, no. 1, p. 101-107, illus., 1969.

273-490 **McGregor, Bonnie A.** Features at the Sohm Abyssal Plain terminus: Marine Geology, v. 6, no. 5, p. 401-414, illus., 1968.

264-479 **McGuire, William H.** Geophysical exploration in eastern Kentucky, *in* Kentucky Oil and Gas Assoc., 30th-31st Ann. Mtgs., 1966-67, Proc. Tech. Sess.: Kentucky Geol. Survey, ser. 10, Spec. Pub. 15, p. 97-102, illus., tables, 1968.

273-076 **McIntyre, Donald B.** Impact metamorphism at Clearwater Lake, Quebec, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 363-366, illus., 1968.

275-129 **McIvor, Ivor K.** Two-dimensional scattering of a plane compressional wave by surface imperfections: Seismol. Soc. America Bull., v. 59, no. 3, p. 1349-1364, illus., 1969.

269-663 **McKee, Edwin D.; Goldberg, Moshe.** Experiments on formation of contorted structures in mud: Geol. Soc. America Bull., v. 80, no. 2, p. 231-244, illus., 1969.

McKee, Edwin H. See *Armstrong, Richard L. 272-007*

266-294 **McKenzie, D. P.** The influence of the boundary conditions and rotation on convection in the Earth's mantle: Royal Astron. Soc. Geophys. Jour., v. 15, no. 5, p. 457-500, illus., 1968.

269-363 **McKenzie, Dan P.** The geophysical importance of high-temperature creep, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 28-44, illus., discussion, 1968.

274-082 **McKenzie, Dan P.** The relation between fault plane solutions for earthquakes and the directions of the principal stresses: Seismol. Soc. America Bull., v. 59, no. 2, p. 591-601, illus., 1969.

275-306 **McKenzie, James F.; Westphal, Karl O.** Transmission of Alfvén waves through the Earth's bow shock: Planetary and Space Sci., v. 17, no. 5, p. 1029-1037, illus., 1969.

McKerrow, W. S. See *Moorbath, S. 267-016*

McKibbin, D. D. See *Wolfe, J. H. 267-388*

McKibbin, Darrell D. See *Intriligator, Devrie S. 272-316*

McKnight, B. K. See *Ward, S. H. 265-210*

McKown, D. M. See *Ehmann, W. D. 270-036*

272-076 **McLaughlin, John F.** Mission support for lunar geoscience, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 13-25, illus., tables, 1968.

274-088 **McLennan, G. A.** An exact correction for accelerometer error in dynamic seismic analysis: Seismol. Soc. America Bull., v. 59, no. 2, p. 705-715, illus., 1969.

McMahon, B. E. See *Strangway, D. W. 266-451*

McMahon, B. E. See *Strangway, David W. 267-435*

McManus, Dean A. See *Carson, Bobb. 270-351*

269-608 **McMaster, Robert L.; Lachance, Thomas P.** Seismic reflectivity studies on northwestern African continental shelf—Strait of Gibraltar to Mauritania: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 12, p. 2387-2395, illus., 1968.

McNeill, J. D. See *Barringer, A. R. 270-106*

268-440 **McPharlin, D.** Coolybring aeromagnetic anomaly: South Australia Dept. Mines Mining Rev., 1966, no. 124, p. 78-84, illus., 1968.

McPherron, R. L. See *Parks, George K. 265-408*

McQuillin, R. See *Bullerwell, W. 274-431*

274-432 **McQuillin, R.; Arnold, Susan E.; Tully, M. C.** Preliminary results of geophysical investigations, *in* Cruise report—Humber investigations, 1968: [Great Britain] Inst. Geol. Sci. Rept., no. 69/3, p. 2-8, 21-22, illus., 1969.

267-246 **McSaveney, M. J.; Gage, M.** Ice flow measurements on Franz Josef Glacier, New Zealand: New Zealand Jour. Geology and Geophysics, v. 11, no. 3, p. 564-592, illus., tables, 1968.

270-468 **McVicar, Barry M.** The digits are coming: Log Analyst, v. 7, no. 3, p. 31-36, 1966.

McWilliams, J. R. See *Bur, T. R. 272-141*

McWilliams, J. R. See *Willard, R. J. 273-479*

Meaburn, G. M. See *Raff, R. A. 269-141*

274-108 **Meade, Buford K.** Precise surveys of the Anchorage monitoring system, *in* The Prince William Sound, Alaska, earthquake of 1964 and aftershocks, V. 3: U.S. Coast and Geod. Survey Pub. 10-3, p. 113-118, illus., tables, 1969.

Mears, Connally E. See *Krivoy, Harold L. 272-487*

Meason, J. L. See *Reynolds, M. A. 274-029*

Mecke, Klaus. See *Frolich, Friedrich. 268-413*

Medd, W. J. See *Dickel, J. R. 268-090*

68-297 **Medlin, W. L.** Natural thermoluminescence of Cretaceous limestones in terms of alpha activity: Geochim. et Cosmochim. Acta, v. 32, no. 11, p. 1165-1176, illus., 1968.

Medovoy, M. M. See *Ivashchenko, G. A. 267-644*

74-350 **Medvedev, N. D.** Nekotoryye rezul'taty magnitnykh nablyudeniy na stantsii Molodezhnoy v 1964 g. [Some results of magnetic observations at Molodezhnaya station in 1964]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 55, p. 44, 1965.

66-148 **Medvedev, S. V.** Issledovaniya kolebaniy plotin iz mestnykh materialov [Investigations of the vibrations of dams made of local materials], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 3-5, 1967.

68-122 **Medvedev, S. V.** Measurement of ground motion and structural vibrations caused by earthquakes, *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 35-38, 1968.

70-084 **Medvedev, S. V.; Karapetyan, B. K.; Bykovskiy, V. A.** Seysmicheskiye vozdeystviya na zdaniya i sooruzheniya [Seismic action on buildings and constructions]: Moscow, Izdatel'stvo Literatury po Stroitel'stvu, 192 p., illus., tables, 1966.

74-165 **Medvedev, S. V.** Tipy seysmicheskikh vozdeystviy pri modelirovaniye [Types of seismic actions in modeling], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 51-57, illus., 1968.

Medvedeva, T. Ye. See *Shlyakhtina, A. P. 264-376*

70-454 **Medwenitsch, Walter.** Zur Geologie der süditalienischen Vulkane – Exkursionsfuhrer [On the geology of the southern Italian volcanoes—Excursion guide]: Geol. Gesell. Wien Mitt., 1966, v. 59, no. 1, 120 p., illus., 1967.

Meeks, Nigel. See *Barker, Harold. 268-017*

Meese, A. D. See *Walther, H. C. 270-460*

73-393 **Megerlin, N.; Rabejanahary, E.** Interprétation géologique des profils magnétiques effectues sur le gisement de fer d'Ambatolaona [Geologic interpretation of the magnetic profiles obtained over the iron deposit of Ambatolaona]: Malagasy République Service Géol. Rap. Ann. 1968, p. 125-129, illus., 1968.

73-394 **Megerlin,** N. Réévaluation du gisement de fer de Marorangotra – Travaux de surface et emplacement des sondages [Reevaluation of the iron deposit of Marorangotra—Surface works and emplacement of bore holes]: Malagasy Republique Service Géol. Rap. Ann. 1968, p. 131-133, illus., 1968.

70-361 **Meidav, T.** New methods in the application of seismic techniques to the determination of rock and soil properties, *in* Asian Regional Conf. Soil Mechanics and Found. Eng., 3d, Haifa, 1967, Proc., V. 1, Div. 1-7: Jerusalem, Israel, Jerusalem Academic Press, p. 342-344, illus., 1967.

75-358 **Meidav, Tsvi.** Hammer reflection seismics in engineering geophysics: Geophysics, v. 34, no. 3, p. 383-395, illus., 1969.

72-002 **Meighan, Clement W.; Foote, Leonard J.; Aiello, Paul V.** Obsidian dating revisited: Science, v. 162, no. 3855, p. 814, 1968.

75-045 **Meighan, Ian G.; Doughty, Philip S.** Recent fall of the Bovedy meteorite, Northern Ireland: Nature, v. 223, no. 5201, p. 24-29, illus., table, 1969.

Meincke, Wilhelm. See *Becher, Dieter. 266-366*

268-230 **Meinel, G.** Regional metamorphism and sialic magmatism in relation to tectonic development in orogenic belts, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc. Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 25-30, illus., 1968.

266-365 **Meinhold, Rudolf.** Über den Zusammenhang geothermischer, hydrodynamische und geochemischer Anomalien und deren Bedeutung für die Klärung der Entstehun von Erdöllagerstatten [On the relationship between geothermal, hydrodynamic, an geochemical anomalies and their significance for the explanation of the origin o petroleum deposits (with Russian and English summ.)]: Zeitschr. Angew. Geologie v. 14, no. 5, p. 233-239, illus., table, 1968.

Meissner, R.; Berckhemer, H. Seismic refraction measurements in the northerr Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Uppe Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no 26), p. 105-107, illus., 1967.

266-087 **Meister, Laurent J.; Burford, Robert O.; Thompson, George A.; Kovach, Rober L.** Surface strain changes and strain energy release in the Dixie Valley-Fairview Peal area, Nevada: Jour. Geophys. Research, v. 73, no. 18, p. 5981-5994, illus., tables 1968.

Meister, Robert. See *Peselnick, Louis. 266-537*

268-302 **Mekhtiyev, Sh. F.; Aliyev, S. A.** On some problems of geothermy in the Caucasus *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of ap plied geophysics: Prague, Academia, p. 103-110, illus., table, 1968.

Mekhtiyev, Sh. F. See *Aliyev, S. A. 269-354*

267-372 **Mekhtiyeva, V. L.; Pankina, R. G.** Izotopnyy sostav sery vodnoy rastitel'nosti sul'fatov vodoyemov [Isotopic composition of the sulfur in aquatic plants and in th sulfates of the water bodies]: Geokhimiya, no. 6, p. 739-742, table, 1968.

275-294 **Mekhtiyeva, V. L.; Kondrat'yev, R. M.; Churmanteyeva, M. N.** Frak sionirovaniye stabil'nykh izotopov sery v protsesse bakterial'nykh okislitel'no-vos tanovitel'nykh reaktsiy [Fractionation of the stable isotopes of sulfur in the proces of bacterial oxidation-reduction reactions], *in* Khimiya Zemnoy Kory—Geol himicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniy akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geol himii i Analit. Khimii, p. 601-615, illus., tables, 1964.

Mekler, Yu. B. See *Volarovich, M. P. 265-264*

266-222 **Melamed, B. M.** Ob uchete iskazheniy krivykh zondirovaniy stanovleniyem poly [On calculating distortions of the curves of field buildup sounding]: Razved Geofizika, no. 25, p. 47-56, illus., 1968.

266-238 **Melamed, G. Sh.** Primeneniye geofizicheskikh metodov pri krupnomasshtabno kartirovanii mestorozhdeniy muskovita v Severnoy Karelii [Use of geophysic methods in large-scale mapping of the muscovite deposits of Northern Karelia], Problemy izucheniya geologii dokembriya—Vses. Soveshchaniye po voprosa izucheniya i metodiki kartirovaniya dokembriyskikh obrazovaniy, Kirovsk 196 Materialy: Leningrad, Izdatel'stvo "Nauka," 1967.

Melcher, G. C. See *Cordani, U. G. 273-014*

Melcher, G. C. See *Hurley, P. M. 273-015*

266-309 **Melchior, P.** Contribution apportée par les marées terrestres dans l'étude de rotation de la terre [Contributions of earth tides to the study of rotation of the Ear (with English abs.)], *in* Continental drift, secular motion of the pole, and rotation the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 71-76, illus., tables, 1968.

269-214 **Melchior, P.; Venedikov, A.** Derivation of the wave M_3 ($8^h.279$) from the periodic tidal deformations of the Earth: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 363-372, illus., tables, 1968.

265-178 **Melchior, Paul; Georis, Baudouin.** Earth tides, precession-nutation and the secular retardation of Earth's rotation: Physics Earth and Planetary Interiors, v. 1, no. 4, p. 267-287, illus., tables, 1968.

Melchior, Paul. See *Flick, J. 274-133*

Meldrum, R. D. See *Russell, R. D. 267-103*

Meleik, M. L. See *ElShazly, E. M. 268-528*

270-131 **Melhorn, H.** Beitrage zur Anwendung des Slingramverfahrens im Salzbergbau [Contributions to the application of the Slingram procedure in salt mining]: Frieberger Forschungshefte, C 226, p. 149-155, illus., 1967.

269-255 **Melickian, G. E.** Geophysical activity in 1967 applied to engineering, construction, and ground water projects: Geophysics, v. 33, no. 6, p. 911-914, tables, 1968.

Melikov, V. R. See *Litvinenko, O. K. 268-284*

Melikov, V. R. See *Tikhonov, A. N. 271-293*

Meliksteyan, B. M. See *Gukasyan, R. Kh. 275-031*

265-053 **Melikyan, L. S.; Palandzhyan, S. A.; Chibukhchyan, Z. O.; Vartazaryan, Zh. S.** K voprosu o geologicheskoy pozitsii i vozraste ofiolitovoy serii Shirako-Sevano-Akerinskoy zony Malogo Kavkaza [On the problem of the geologic position and age of the ophiolite series of the Shirako-Sevano-Akera zone of the Lesser Caucasus]: Akad. Nauk Armyan SSR Izv. Nauki o Zemle, v. 20, nos. 1-2, p. 21-41, illus., table, 1967.

Mellen, Robert H. See *Browning, David G. 267-574*

272-199 **Mellor, Malcolm; Smith, James H.** Creep of snow and ice: U.S. Army Materiel Command Cold Regions Research and Eng. Lab. Research Rept. 220, 13 p., illus., 1966.

273-282 **Mellor, Malcolm; Testa, Richard.** Effect of temperature on the creep of ice: Jour. Glaciology, v. 8, no. 52, p. 131-145, illus., tables, 1969.

273-283 **Mellor, Malcolm; Testa, Richard.** Creep of ice under low stress: Jour. Glaciology, v. 8, no. 52, p. 147-152, illus., table, 1969.

275-157 **Mel'nichuk, M. I.** Vozmozhnosti metoda yestestvennogo elektricheskogo polya pri issledovanii oslablennykh zon razvitiya karsta khemogennykh otlozheniy Predkarpat'ya (na primere Stebnika) [Possibilities of the self potential method in investigating weakened zones of karst development in the chemogenic formations of Ciscarpathia (illustrated by the Stebnik (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 61-68, illus., 1969.

Mel'nik, I. M. See *Budnikov, N. P. 275-193*

Mel'nikov, A. G. See *Babak, A. P. 269-710*

Mel'nikov, A. V. See *Borodin, P. M. 264-430*

268-634 **Mel'nikov, D. A.** Zavisimost' predel'nogo otnositel'nogo soprotivleniya glinistykh peschanikov ot poristosti i glinistosti [Dependence of the critical relative resistivity of shaly sandstones on porosity and clay content]: Prikladnaya Geofizika, no. 53, p. 149-15& 9, illus., tables, 1968.

Mel'nikov, D. A. See *Kotov, P. T. 270-515*

265-248 **Mel'nikov, V. P.** Opyt izmereniya vyzvannoy polyarizatsii v garmonicheskikh polyakh [Attempt to measure induced polarization in harmonic fields]: Razved. Geofizika, no. 24, p. 55-59, illus., 1967.

268-603 **Melson, W. G.; Thompson, Geoffrey; vanAndel, Tjeerd H.** Volcanism and metamorphism in the Mid-Atlantic Ridge, 22° N. latitude: Jour. Geophys. Research, v. 73, no. 18, p. 5925-5941, illus., tables, 1968.

Menard, H. W. See *Northrop, J. 264-090*

Menard, H. W. See *Larson, Roger L. 264-210*

265-289 **Menard, H. W.; Atwater, Tanya.** Changes in direction of sea floor spreading: Nature, v. 219, no. 5153, p. 463-467, illus., 1968.

269-296 **Menard, H. W.** Some remaining problems in sea floor spreading, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 109-116, illus.; discussion, p. 116-118, 1968.

274-234 **Menard, H. W.; Atwater, Tanya.** Origin of fracture zone topography: Nature, v. 222, no. 5198, p. 1037-1040, illus., 1969.

269-681 **Menard, Henry W., Jr.** Marine geology, *in* Mineral resources of the world ocean—Symposium, Newport, R. I.; 1968, Proc.: Rhode Island Univ. Graduate School Oceanography Occasional Pub. 4, p. 7-8, 1968.

265-043 **Mendes, Francisco.** Determinação, pelo método do rubídio-estrôncio, da idade absoluta de três biotites provenientes de granitos da Provincia de Macau [Determination, by the rubidium-strontium method, of the absolute age of three biotites from granites of the Province of Macao (with French and English abs.)]: Garcia Orta, v. 14, no. 2, p. 269-277, tables, 1966.

Menendez, L. See *Alvarez, U. 273-135*

Meng, C.-I. See *Akasofu, Syun-Ichi. 273-329*

Meng, C.-I. See *Akasofu, S.-I. 273-349*

275-300 **Meng, C.-I.; Akasofu, Syun-Ichi.** A study of polar magnetic substorms—[Pt.] 2, Three-dimensional current system: Jour. Geophys. Research, v. 74, no. 16, p. 4035-4053, illus., 1969.

Men'shikova, R. T. See *Popov, Yu. N. 265-061*

267-087 **Menzel, D. H.** The nature of the surface of the Moon, illustrated in part by 3-D slides taken from Ranger photographs, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 113-121, illus., 1967.

Mercado, E. J. See *Davies, E. B. 266-505*

269-596 **Mercado, E. J.** Linear phase filtering of multicomponent seismic data: Geophysics, v. 33, no. 6, p. 926-935, illus., 1968.

273-002 **Mercer, J. H.** Glaciation in southern Argentina more than two million years ago: Science, v. 164, no. 3881, p. 823-825, illus., table, 1969.

270-493 **Mercer, R. F.** The use of flame ionization detection in oil exploration, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. F1-F10, illus., 1968.

264-293 **Mereu, R. F.** Correction to "Curvature corrections to upper mantle refraction surveys" [1967]: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 184, table, 1968.

272-252 **Mereu, R. F.; Hunter, J. A.** Crustal and upper mantle structure under the Canadian Shield from Project Early Rise data: Seismol. Soc. America Bull., v. 59,no. 1, p. .147-165, illus., tables, 1969.

274-418 **Merkel, Richard H.; Alexander, Shelton S.** Use of correlation analysis to interpret continental margin ECOOE refraction data: Jour. Geophys. Research, v. 74, no. 10, p. 2683-2697, illus., tables, 1969.

Merkulov, V. I. See *Kivshik, N. K. 268-562*

270-534 **Merkulov, V. I.; Amirov, A. N.; Kivshik, N. K.; Karasik, V. M.; Didenko, S. I.** Izucheniye skorostnoy kharakteristiki i volnovogo seysmicheskogo polya v razvedochnykh skvazhinakh Kryma [Study of the velocity characteristics and seismic wave field in exploratory wells in Crimea (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 48-51, illus., table, 1968.

Merkulov, V. I. See *Amirov, A. N. 275-451*

Merkulova, K. I. See *Chalov, P. I. 272-292*

265-201 **Merkulova, V. M.** Pogloshcheniye ul'trazvukovykh voln v gornykh porodakh v oblasti chastot 10-100 kgts [Absorption of ultrasonic waves in rocks in the 10-100 khz frequency range]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 20-25, illus., table, 1968.

273-373 **Merrill, R. T.; Grommé, C. S.** Nonreproducible self-reversal of magnetization in diorite: Jour. Geophys. Research, v. 74, no. 8, p. 2014-2024, illus., 1969.

269-667 **Merrill, Robert H.** Bureau contribution to slope angle research at the Kimbley Pit, Ely, Nevada: Soc. Mining Engineers Trans., v. 241, no. 4, p. 513-525, illus., 1968.

268-418 **Merrill, Ronald T.** A possible source for the coercivity of ilmenite-hematite minerals: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 181-185, 1968.

266-106 **Mescherikov, J. A.** Recent crustal movements in seismic regions—Geodetic and geomorphic data, *in* Earthquake prediction—Proceedings of a symposium, Zürich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 29-39, illus., 1968.

264-511 **Meshbey, V. I.** Elementy teorii nakaplivaniya regularnykh seysmicheskikh voln, zaregistrirovannykh po sisteme mnogokratnogo proslezhivaniya [Elements of the theory of accumulation of regular seismic waves recorded by a multiple-trace system]: Prikladnaya Geofizika, no. 51, p. 3-16, illus., table, 1968.

268-550 **Meshbey, V. I.** Otsenka effektivnosti nakaplivaniya zapisey, zaregistrirovannykh po metodike mnogokratnogo proslezhivaniya, pri podavlenii dvukhkratnykh otrazheniy v usloviyakh negorizontal'nogo zaleganiya granits razdela [Estimation of the efficiency of accumulation of seismic records registered by the multiple tracking procedure, suppression of twice-reflected multiples in conditions of nonhorizontal attitude of the discontinuities]: Prikladnaya Geofizika, no. 52, p. 8-17, illus., 1968.

Meshbey, V. I. See *Slutskovskiy, A. I. 268-551*

270-387 **Meshbey, V. I.; Vaks, Z. M.** O primenenii bol'shikh baz summirovaniya v metode RNP [On the use of large summation bases in the controlled direction pickup procedure]: Razved. Geofizika, no. 29, p. 28-32, illus., 1968.

Meshcherskiy, I. N. See *Liliyenberg, D. A. 269-318*

Meshcherskiy, I. N. See *Britsyna, M. P. 269-319*

Meshcherskiy, N. S. See *Zvegintsev, A. G. 274-368*

271-193 **Meshcheryakov, Yu. A.** Third International Symposium on Recent Crustal Movements (Leningrad May 22-29, 1968): Bull. Géod., no. 90, p. 387-391, 1968.

265-641 **Meskó, Attila.** A sebességszurés matematikai alapjai, digitális megvalosítása és közelítésének lehetőségei, II [The mathematical bases of velocity filtering, its digital realization, and possibilities of improvement, (Pt.) 2 (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 1, p. 1–19, illus., tables, 1968.

270-382 **Meskó, Attila; Rádler, Béla.** Modellszámítások alkalmazása a szeizmikus adatfeldolgozas és értelmezés előkészítésében [Application of model calculations in the preparation of seismic data processing and interpretation (with Russian an German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 152-163, illus., tables, 1968

270-520 **Mesropyan, V. S.; Orekhov, O. R.; Chelok'yan, R. S.** Isklyucheniye pogreshnosti vyzvannoy sovpadeniyem impul'sov v mnogokanal'noy apparature radioaktivnogo karotazha [Elimination of error caused by the coincidence of pulses in multichannel apparatus of radioactivity logging]: Geofiz. Apparatura, no. 35, p. 62-64, illus., 1968

265-678 **Mészáros, F.** Különböző gamma-forrásokkal vegzett szórt gamma-típusú szel vényezésről [On gamma-scattering logging with various gamma sources (wit Russian and German summ.)]: Magyar Geofizika, v. 9, no. 2, p. 69-79, illus., 1968

Metallova, V. V. See *Petrov, I. N. 267-446*

267-448 **Metallova, V. V.; Faynberg, F. S.; Lind, E. N.** Ob odnom sluchaye obratnoy polyarnosti intruzivnykh trappov [On a case of reverse polarity of intrusive traps] Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 102-106, illus., table, 1968.

Metcalfe, Ralph. See *Barricelli, Nils Aall. 273-105*

270-357 **Metzger, Adolf A. T.** On the general principles of seismic prospecting: [Finland Geol. Tutkimuslaitos Geotek. Julkaisuja, no. 68, p. 5-17, illus., 1965.

265-219 **Meunier, Jean.** Oscillations telluriques de periode lunaire enregistres dans l Mayenne, a 60 km de la mer [Telluric oscillations of lunar period recorded in th Mayenne 60 km from the sea]: Acad. Sci. Comptes Rendus, ser. B, v. 265, no. 17, p 953-956, illus., 1967.

272-168 **Meunier, Jean.** Sondage electrique de la croûte terrestre utilisant les courants d retour industriels [Electrical sounding of the Earth's crust using industrial return cur rents]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 6, p. 514-517, illus., 1969.

274-180 **Meyer de Stadelhofen, Camille; Favini, Giancarlo.** Exemple d'étude électrique d sous-sol lacustre [Example of electrical study of a lacustrine substratum]: Soc. Vau doise Sci. Nat. Bull., v. 70, pt. 2, no. 327, p. 55-56, illus., 1968.

265-686 **Meyer, V. A.; Kudryavtsev, Yu. I.; Shul'gin, V. S.** Apparatura karotazha magni noy vospriimchivosti s dvukhatushechnym zondom [Magnetic susceptibility loggin apparatus with two-coil sonde]: Geofiz. Apparatura, no. 32, p. 44-51, illus., table 1967.

267-638 **Meyer, V. A.** Geofizicheskiye metody izucheniya veshchestvennogo i element nogo sostava rud v skvazhinakh [Geophysical methods of studying the mineralogica

and element composition of ores in wells]: Leningrad. Univ. Vestnik, Ser. Geologiya i Geografiya, no. 6, issue 1, p. 41-55, illus., table, 1968.

266-253 **Meyerhoff, A. A.** Arthur Holmes—Originator of spreang ocean floor hypothesis: Jour. Geophys. Research, v. 73, no. 20, p. 6563-6565, illus., 1968.

265-614 **Meyerhoff, H. J.** Realization of sharp cut-off frequency characteristics on digital computers, Pt. 1: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 208-219, illus., 1968.

265-615 **Meyerhoff, H. J.** Realization of sharp cut-off frequency characteristics on digital computers, Pt. 2: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 220-246, illus., 1968.

274-436 **Meyerhoff, H. J.** Realization of sharp cut-off frequency characteristics on digital computers, Pt. 3: Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 491-510, illus., 1968.

Mezzadri, M. G. See *Schreiber, B. 274-411*

Michaelis, H. von. See *Ahrens, L. H. 267-55*

268-366 **Michel, F. C.** Lunar wake at large distances: Jour. Geophys. Research, v. 73, no. 23, p. 7277-7283, illus., table, 1968.

266-501 **Michelsen, O. B.; Steinnes, E.** Determination of copper in geological material by neutron activation and gamma-gamma coincidence spectrometry: Talanta, v. 15, no. 6, p. 574-578, illus., tables, 1968.

Michon, D. See *Geneslay, Raymond. 268-574*

Michot, J. See *Pasteels, P. 274-012*

Mickey, W. See *Springer, D. 266-174*

265-604 **Middleton, David; Whittlesey, John R. B.** Seismic models and deterministic operators for marine reverberation: Geophysics, v. 33, no. 4, p. 557-583, illus., 1968.

Middleton, F. H. See *Fain, Gilbert. 272-493*

Midtsev, B. F. See *Kantorivich, V. L. 271-392*

65-242 **Miecnik, Juliusz.** Pole prądów tellurycznych w przypadku ośrodka z płaskimi granicami rozdziału [The telluric current field in the case of a section with horizontal boundaries (with English summ.)]: Acta Geophys. Polonica, v. 15, no. 4, p. 375-383, illus., 1967.

271-014 **Mielke, James E.; Long, Austin.** Smithsonian Institution radiocarbon measurements V: Radiocarbon, v. 11, no. 1, p. 163-182, 1969.

268-055 **Mietelski, Jan.** A simple method of lunar surface navigation: Icarus, v. 9. no. 2, p. 315-325, illus., 1968.

Mifflin, R. See *Rea, D. G. 267-074*

264-570 **Migunov, B. B.** O promezhutochnoy registratsii rezul'tatov radioaktivnogo karotazha [On intermediate recording of the results of radioactivity logging]: Prikladnaya Geofizika, no. 50, p. 176-181, illus., 1967.

264-586 **Migunov, B. B.; Kholin, V. N.; Kharitonov, S. Ye.** O spektrometricheskoy stsintillyatsionnoy apparature massovogo primeneniya dlya radioaktivnogo karotazha skvazhin rudnykh mestorozhdeniy [On massive-use spectrometric scintillation apparatus for radioactive logging of boreholes in ore deposits (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 80-84, illus., 1968.

Migunov, B. B. See *Bragin, A. A. 266-573*

267-384 **Mihalov, J. D.; Sonett, C. P.** The cislunar geomagnetic tail gradient in 1967: Jou Geophys. Research, v. 73, no. 21, p. 6837-6841, illus., tables, 1968.

Mii, Hideo. See *Sato, Takahiro. 264-546*

Mikerina, N. V. See *Ivanov, K. G. 264-358*

264-373 **Mikerina, N. V.** Planetary picture of the distribution of the rate of change of tl Sq variation of the geomagnetic field: Geomagnetism and Aeronomy, v. 8, no. 1, 88-90, illus., 1968.

Mikerina, N. V. See *Ivanov, K. G. 267-425*

Mikhailov, L. N. See *Cherkasov, I. I. 268-100*

Mikhaylin, A. S. See *Omes', S. P. 269-706*

269-653 **Mikhaylitskiy, Yu. P.; Starobinets, A. Ye.** Stroyeniye skladchatogo fundamen Yugo-Vostochnoy Turkmenii [Structure of the folded basement of southeaste Turkmenia]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 16-20, illus., 1968.

Mikhaylov, A. A. See *Aspisov, S. K. 266-572*

273-109 **Mikhaylov, A. A.** L'exploration de la Lune [Exploration of the Moon]: A tronomie, v. 83, no. 2, p. 59-64, 1969.

267-232 **Mikhaylov, A. Ye.** Tektonicheskiye dvizheniya i skladchatost' geosinklinal'ny oblastey [Tectonic movements and folding of geosynclinal regions (with Engli summ.)]: Geotektonika, no. 5, p. 3-11, illus., 1968.

Mikhaylov, D. A. See *Levchenkov, O. A. 265-050*

Mikhaylov, I. N. See *Vikhirev, B. V. 264-196*

266-345 **Mikhaylov, I. N.** Ob opredelenii plotnosti promezhutochnogo sloya [On det mination of the density of the intermediate layer]: Razved. Geofizika, no. 25, p. 5 59, illus., 1968.

267-272 **Mikhaylov, I. N.** Primer vychisleniya vertikal'nogo anomal'nogo gradiyenta s tyazhesti v skvazhine [An example of calculation of the vertical anomalous gradie of gravity in a borehole]: Razved. Geofizika, no. 27, p. 54-56, illus., 1968.

273-300 **Mikhaylov, N. N.** Vychisleniye uskoreniya pri obrabotke morskikh may nikovykh nablyudeniy [Calculation of acceleration in processing marine penduli observations], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 142-144, illus., 1968.

266-197 **Mikhaylova, N. G.; Pariyskiy, B. S.** Obratnaya zadacha dlya volnovogo ur neniya pri poverkhnostnom istochnike [The inverse problem for the wave equati in the case of a surface source], *in* Nekotoryye pryamyye i obratnyye zada seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, 4, p. 95-138, illus., 1968.

266-480 **Mikhaylova, N. P.** Opyt termomagnitnoy chistki kristallicheskikh porod [A tempt as thermomagnetic cleaning of crystalline rocks (with English summ.)]: Ak Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 23-31, illus., 1968.

272-375 **Mikhaylova, N. P.; Glevasskaya, A. M.** Namagnichennost' osnovnykh i traosnovnykh porod Ukrainskogo shchita i yeye ispol'zovaniye v geologii [M netization of the basic and ultrabasic rocks of the Ukrainian shield and its utilizati in geology]: Kiev, Akad. Nauk Ukrain. SSR Inst. Geofiziki (Naukova Dumka), p., illus., tables, 1965.

Mikhaylovskiy, V. N. See *Kul'ko, V. F. 272-178*

Mikhaylovskiy, V. N. See *Kul'ko, V. F. 274-192*

Mikhaylovskiy, V. N. See *Kul'ko, V. F. 274-193*

Mikheyev, V. V. See *Cherkasov, I. I. 265-099*

Mikheyev, V. V. See *Cherkasov, I. I. 268-100*

Mikheyeva, S. V. See *Telegin, A. N. 264-508*

Mikholevskiy, V. I. See *Pospeyev, V. I. 273-197*

Mikhota, G. G. See *Bessonova, E. N. 266-533*

273-464 **Mikhota, G. G.; Tulina, Yu. V.** Mezhdunarodnoye soveshchaniye ekspertov po vzryvnoy seysmologii [International conference of experts on explosion seismology]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 107-109, 1969.

266-571 **Mikolayevskiy, E. Yu.; Aliyev, R. G.** K otsenke neftegazonosnosti glinistykh kollektorov [On the estimation of the oil- and gas-bearing capability of shaly reservoirs]: Razved. Geofizika, no. 25, p. 85-94, tables, 1968.

268-632 **Mikolayevskiy, E. Yu.** Otsenka neftegazonosnosti glinistykh kollektorov po dannym karotazha [Estimation of the oil- and gas-bearing capability of argillaceous reservoirs from logging data]: Prikladnaya Geofizika, no. 52, p. 192-201, illus., table, 1968.

Mikshantsev, K. B. See *Grinberg, G. A. 271-207*

Mikumo, Takeshi. See *Mino, Kazuo. 271-083*

271-111 **Mikumo, Takeshi; Nakagawa, Ichiro.** Some problems on the analysis of the earth tides: Jour. Physics Earth, v. 16, no. 2, p. 87-95, illus., tables, 1968.

271-316 **Mikumo, Takeshi; Kurita, Tuneto.** A distribution for long-period P waves in the mantle: Jour. Physics Earth, v. 16, no. 1, p. 11-29, illus., tables, 1968.

Mikumo, Takeshi. See *Oike, Kazuo. 272-120*

272-524 **Milanovskiy, Ye. Ye.** Atlantida v Egeyskom more, [Atlantis in the Aegean Sea,]: Priroda, no. 1, p. 60-68, illus., 1969.

Milashin, A. P. See *Gaynanov, A. G. 268-315*

275-371 **Milashin, A. P.; Snegorovskoy, S. S.; Tuyezov, I. K.** Stroyeniye osadochnoy tolshchi Yaponskogo morya po materialam nepreryvnogo profilirovaniya metodom otrazhennykh voln [Structure of the sedimentary layer of the Japan Sea according to data of continuous reflection profiling]: Akad. Nauk SSSR Doklady, v. 183, no. 5, p. 1060-1063, illus., 1968.

Milashina, K. G. See *Korsakov, O. D. 269-650*

268-036 **Miles, A. A.** Boron in carbonaceous chondrites: Nature, v. 220, no. 5172, p. 1113-1114, 1968.

Militeyev, A. N. See *Solov'yev, S. L. 271-106*

Mil'kevich, R. I. See *Kotov, N. V. 272-247*

265-045 **Miller, D. K.; Bagley, M.; Rao, M. N.** Fission track ages of mica minerals: Zeitschr. Naturforschung, v. 23a, no. 7, p. 1093-1094, table, 1968.

271-053 **Miller, D. N., Jr.** Southern Illinois earthquake 1968: Earth Sci. Bull., v. 1, no. 4, p. 15a17, illus., 1968.

264-010 **Miller, Donald S.; Jaeger, Emil.** Fission track ages of some alpine micas: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 375-378, tables, 1968.

264-011 **Miller, Donald S** Fission track ages on 250 and 2,500 m.y. micas: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 379-383, table, 1968.

268-022 **Miller, Donald S.; Jäger, Emilie; Schmidt, Klaus.** Rb-Sr-Altersbestimmungen an Biotiten der Raibler Schichten des Brenner Mesozoikums und am Muskovit-granitgneiss von Vent (Ötztaler Alpen) [Rb-Sr age determinations on biotites of the Raibler beds of the Brenner Mesozoic complex and on the Vent muscovite granite gneiss (Otztal Alps) (with English abs.)]: Eclogae Geol. Helvetiae, v. 60, no. 2, p. 537-541, illus., table, 1967.

Miller, J. A. See *Siedner, G. 265-008*

Miller, J. A. See *Brown, P. E. 266-028*

Miller, J. A. See *Sarkar, S. N. 272-024*

Miller, J. A. See *Westoll, N. D. S. 273-033*

Miller, J. A. See *Dunham, K. C. 274-010*

Miller, J. A. See *Bishop, W. W. 275-001*

271-109 **Miller, Richard H.** Synodic month—Variations in the geologic past: Science, v 164, no. 3875, p. 67-68, 1969

267-157 **Miller, V. C.** Current trends in photogeology and in the use of other remot sensing methods in geological interpretation: Earth-Sci. Rev., v. 4, no. 2, p. 135-152 1968.

269-004 **Milliman, John D.; Emery, K. O.** Sea levels during the past 35,000 years Science, v. 162, no. 3858, p. 1121-1123, illus., 1968.

269-128 **Mills, G. A.; Sudbury, P. V.** Absolute coordinates of lunar features, [Pt.] Icarus, v. 9, no. 3, p. 538-561, illus., 1968.

Mills, W. R. See *Hilchie, D. W. 270-495*

Mills, W. R. See *Hilchie, D. W. 272-541*

Mills, W. R. See *Hilchie, D. W. 273-502*

Mills, W. R., Jr. See *Givens, W. W. 270-479*

Milne, W. G. See *White, W. R. H. 268-534*

274-090 **Milne, W. G.; Davenport, A. G.** Distribution of earthquake risk in Canad Seismol. Soc. America Bull., v. 59, no. 2, p. 729-754, illus., tables, 1969.

275-104 **Milne, W. G.; Smith, W. E. T.** Canadian earthquakes, 1963: Dominion Observ tory Seismol. Ser. 1963-4, 30 p., illus., tables, 1966.

Mil'nichuk, V. S. See *Arabadzh, M. S. 264-265*

275-207 **Milovanović, Branislav; Mladenović, Milan.** On some results of geological an geophysical research in the ophiolitic zone of the Inner Dinarides: [Yugoslavi Zavod Geol. i Geofiz. Istrazivanja Vesnik Primen. Geofizika 1966-67, ser. A, nos. 2 25, p. 5-18, illus., 1968.

272-293 **Milovskiy, A. V.; Dontsova, Ye. I.** Izotopnyye kriterii genezisa prirodnykh obrazovaniy SiO_2 [Isotopic criteria of the genesis of natural SiO_2 formations (with English summ.)]: Geokhimiya, no. 8, p. 914-920, tables, 1968.

273-060 **Milton, Daniel J.** Structure of the Henbury meteorite craters, Australia, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 115-116, 1968.

Minai, Ryoichiro. See *Kobori, Takuji. 265-154*

Minai, Ryoichiro. See *Kobori, Takuji. 274-129*

Minakami, Takeshi. See *Peck, Dallas L. 267-617*

271-562 **Minakami, Takeshi; Shimozuru, Daisuke; Miyazaki, Tsutomu; Hiraga, Shiro; Yamaguti, Masaru.** The 1959 eruption of Simmoe-dake and the 1961 Iimori-yama earthquake swarm [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 965-992, illus., tables, 1968.

Mindeli, P. Sh. See *Aleksidze, M. A. 266-251*

Mindeli, P. Sh. See *Balavadze, B. K. 266-354*

274-172 **Mines Magazine.** Deep probe explores Earth's interior: Mines Mag., v. 58, no. 6, p. 28-29, illus., 1968.

275-134 **Mines Magazine.** Recording nuclear blast: Mines Mag., v. 58, no. 6, p. 8-9, illus., 1968.

Mineyev, V. Ye. See *Priyma, V. I. 266-516*

274-212 **Mining in Canada.** Canadian specialists are in demand around the world: Mining in Canada, September-August, 1968, p. 73-76, 1968.

271-083 **Mino, Kazuo; Onoguchi, Toshiyuki; Mikumo, Takeshi.** Focal mechanism of earthquakes on island arcs in the southwest Pacific region: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 2, p. 78-96, illus., tables, 1968.

275-158 **Minosyan, R. S.** Primeneniye metoda yestestvennogo elektricheskogo toka dlya opredeleniya mest podzemnoy utechki iz oz. Sevan [Use of the self-potential method to determine places of underground leakage from Lake Sevan]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, no. 1, p. 41-46, illus., 1965.

275-159 **Minosyan, R. S.** Novyye dannyye o kharaktere podlavovogo rel'yefa severnoy chasti Gegamskogo vulkanicheskogo nagor'ya [New data on the character of the sub-lava relief of the northern part of the Gegam volcanic plateau]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, nos. 3-4, p. 49-53, illus., 1965.

275-162 **Minosyan, R. S.** K metodike interpretatsii krivykh elektrozondirovaniya, poluchennykh v vulkanicheskikh rayonakh [On a procedure of interpreting electrical sounding curves obtained in volcanic regions]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 19, no. 6, p. 95-97, illus., table, 1966.

Mints, A. Z. See *Bespalov, D. F. 272-554*

270-110 **Mintzer, O. W.** Remote sensing for engineering investigation of terrain-photographic systems, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 687-699, illus., 1968.

264-576 **Minukhin, V. B.** O tochnosti i perspektivakh analogovoy promezhutochnoy magnitnoy zapisi dannykh promyslovo-geofizicheskikh issledovaniy [On the accuracy and promise of analog intermediate magnetic recording of geophysical logging data]: Prikladnaya Geofizika, no. 51, p. 156-169, illus., 1968.

270-099 **Mirbagheri, M.; Todd, F. C.; Ward, S. H.** The near field of a horizontal fini electric dipole at the surface of an anisotropic Earth: Oklahoma Acad. Sci. Proc 1966, v. 47, p. 254-262, illus., 1968.

265-468 **Mirchink, M. F.; Averbukh, I. O.; Krylov, N. A.; Romanov, Yu. A.** O metodik vyyavleniya pogrebennykh paleozoyskikh razlomov v predelakh molodykh platfor [On a procedure for bringing out buried Paleozoic faults within young platforms Akad. Nauk SSSR Doklady, v. 180, no. 4, p. 1201-1203, illus., 1968.

269-278 **Mirchink, M. F.; Benenson, V. A.; Vortman, M. Z.; Dmitriyev, L. P.; Ko modem'yanskiy, V. V.; Patsula, I. M.; Tolmachev, V. V.; Tokarev, V. P.** Novy geologo-geofizicheskiye svedeniya o geologicheskom stroyenii Mangyshlaka [Ne geologic and geophysical information on the geologic structure of the Mangyshlak) *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," 209-214, illus., 1968.

275-372 **Mirchink, M. F.; Benenson, V. A.; Dmitriyev, L. P.; Kunin, N. Ya.; Yuferov, Y K.** O zadachakh dal'neyshego razvitiya geologopoiskovykh rabot na neft' i gaz Mangyshlake [On the problems of future development of geological prospecti operations for oil and gas in Mangyshlak]: Geologiya Nefti i Gaza, no. 4, p. 6-12, lus., 1969.

275-255 **Miridzhanyan, R. T.** Geotermicheskoye rayonirovaniye territorii Armyansko SSR [Geothermal regionalization of the territory of the Armenian S.S.R.]: Aka Nauk Armyan. SSR Izv. Nauki o Zemle, v. 18, nos. 3-4, p. 67-74, illus., 1965.

265-065 **Mirkina, S. L.; Iskanderova, A. D.** Graficheskiye metody obrabotki eksperime tal'nykh dannykh i ikh ispol'zovaniye dlya interpretatsii raskhodyashchikhs znacheniy vozrasta, poluchayemykh svintsovym metodom [Graphic methods treating experimental data and their use in interpreting discordant lead age result *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. In p. 112-122, illus., 1967.

265-066 **Mirkina, S. L.** Metody opredeleniya soderzhaniya urana, toriya, i svintsa radioaktivnykh mineralakh [Methods of determining uranium, thorium, and le contents of radioactive minerals], *in* Metodam opredeleniya absolyutnogo vozra mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningr Vses. Nauchno-Issled. Geol. Inst., p. 123-134, 1967.

271-294 **Mironov, V. S.** Rezul'taty polevykh ispitaniy gravimetra VIRG-61 [Results field tests of the VIRG-61 gravimeter]: Geofiz. Apparatura, no. 31, p. 162-166, ill 1967.

Mirtonova, V. A. See *Berzon, I. S. 274-441*

265-143 **Mirzaghafoury, Hassan.** A statistical study on the frequency distribution microearthquakes at Matsushiro, Japan, *in* Individual studies by participants to International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, ternat. Inst. Seismology and Earthquake Eng., p. 23-31, tables, 1966.

Mirzakhanov, M. K. See *Bliskavka, A. G. 275-375*

Mirzoyev, K. M. See *Vinogradov, S. D. 265-206*

Mishakov, G. S. See *Ostistyy, B. K. 275-177*

264-137 **Misharina, L. A.** (and others). Zemletryaseniya Baykala [Earthquakes in Baikal], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR 103-127, illus., table, 1967.

265-173 **Misharina, L. A.** (and others). Zemletryaseniya Baykala [Earthquakes in the Baikal area], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 100-118, illus., table, 1967.

Misharina, L. A. See *Balakina, L. M. 266-146*

Misharina, L. A. See *Pshennikov, K. V. 267-127*

Misharina, L. A. See *Balakina, L. M. 275-108*

Mishen'kin, B. P. See *Krylov, S. V. 269-658*

272-504 **Mishen'kin, B. P.** Ispol'zovaniye obmennykh voln pri glubinnykh seysmicheskikh issledovaniyakh v Zapadnoy Sibirii [Use of converted waves in deep seismic investigations in West Siberia]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 82-92, illus., 1968.

Mishen'kina, Z. R. See *Krylov, S. V. 269-658*

264-379 **Mishin, V. M.** Electric currents flowing along geomagnetic lines of force in the magnetosphere: Geomagnetism and Aeronomy, v. 8, no. 1, p. 134-137, illus., table, 1968.

Mitalev, I. A. See *Ben'ko, Ye. I. 264-516*

270-004 **Mitchell, A. H. G.** Raised reef-capped terraces and Plio-Pleistocene sea level changes, north Malekula, New Hebrides: Jour. Geology, v. 77, no. 1, p. 56-67, illus., table, 1969.

275-360 **Mitchell, B. J.; Landisman, M.** Electromagnetic seismograph constants by least-squares inversion: Seismol. Soc. America Bull., v. 59, no. 3, p. 1335-1348, illus., tables, 1969.

264-017 **Mitchell, J. G.** The argon-40/argon-39 method for potassium-argon age determination: Geochim. et Cosmochim. Acta, v. 32, no. 7, p. 781-790, illus., tables, 1968.

Mitchell, J. G. See *Dunham, K. C. 274-010*

265-610 **Mitchell, Robert E.** Seismic and resistivity matured, *in* Highway geology symposium, 17th Ann., Iowa State Univ., 1966, Proc.: Iowa State Univ. Dept. Earth Sci. Pub. 1, p. 14-26, illus., 1968.

275-089 **Mitronovas, Walter; Isacks, Bryan; Seeber, Leonardo.** Earthquake locations and seismic wave propagation in the upper 250 km of the Tonga Island arc: Seismol. Soc. America Bull., v. 59, no. 3, p. 1115-1135, illus., tables, 1969.

Mitryayeva, N. M. See *Zamyatin, N. I. 274-308*

Mitsushio, Hiromi. See *Sato, Takahiro. 264-546*

Mitsushio, Hiromi. See *Furukawa, Hiroyasu. 265-047*

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Mituch, E. See *Subbotin, S. 267-581*

Miura, Osamu. See *Nishimura, Kasuke. 275-112*

Miyake, Yasuo. See *Sugimura, Yukio. 269-083*

270-019 **Miyake, Yasuo; Sugimura, Yukio; Matsumoto, Eiji.** Ionium-thorium chronology of the Japan Sea cores: Recs. Oceanog. Works Japan, v. 9, no. 2, p. 189-195, illus., tables, 1968.

267-090 **Miyamoto, S.** Some geological aspects of the lunar crust—An interpretation of the photographs taken by Ranger, Surveyor, and Orbiter Probes, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 177-184, illus., 1967.

268-058 **Miyamoto, S.** Morphological study of the lunar crust: Icarus, v. 9, no. 2, p. 373-390, 1968.

269-123 **Miyamoto, S.; Hattori, A.** Polar cap of Mars: Icarus, v. 9, no. 3, p. 440-445, illus., 1968.

269–169 Miyamoto, S. Mantle convection and selenological histories: Ostrava Vysoké Školy Báňské, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 183-192, 1968.

Miyamura, S. See *Rikitake, T. 265-357*

266-318 **Miyamura, Setumi; Okada, Atusi; Izutuya, Sadakatu; Sugimura, Arata.** Levelling resurvey along the River Oguni, Yamagata Prefecture [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 405-412, illus., table, 1968.

268-111 **Miyamura, Setumi.** Seismicity of island arcs and other arc tectonic regions of the Circum-Pacific zone, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 60-69, illus., tables, 1968.

265-085 **Miyashiro, Akiho; Murayama, Sadao.** The Nio, Okabe, and Tane chondrites and their origin: Chemie Erde, v. 26, no. 3, p. 218-231, tables, 1967.

Miyata, Kin'ichi. See *Yamasaki, Masao. 273-498*

Miyazaki, Tsutomu. See *Minakami, Takeshi. 271-562*

272-121 **Miyoshi, Hisashi.** Re-consideration on directivity of the tsunami, [Pt.] 1 [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 121-138, illus., tables, 1968.

Miyoshi, Yukio. See *Nishitake, Teruo. 265-200*

273-474 **Mizinov, N. V.; Dyadyuk, N. P.** O perspektivakh neftenosnosti severnoy chasti Turgayskogo progiba [On the oil prospects of the northern part of the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 42-48, 1964.

264-224 **Mizoue, Megumi.** Modes of secular vertical movements of the Earth's crust, Pt. 1 [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 1020-1090, illus., tables, 1967.

266-132 **Mizoue, Megumi.** Earthquake magnitude determination in relation to regiona variations of P-wave amplitudes, Pt. 1 [with Japanese abs.]: Tokyo Univ. Earthquak Research Inst. Bull., v. 46, pt. 3, p. 457-484, illus., tables, 1968.

Mizuno, Hiroshi. See *Nishimura, Kasuke. 275-112*

Mizuno, T. See *Hayakawa, S. 268-056*

Mizutani, Hitoshi. See *Kanamori, Hiroo. 265-333*

Mizyuk, L. Ya. See *Lutsyshin, A. S. 265-258*

Mizyuk, L. Ya. See *Lutsishin, A. S. 270-169*

271-137 **Mizyuk, L. Ya.; Podzharyy, V. M.** O printsipakh invariantnykh izmereniy polyosey polnogo ellipsa polyarizatsii magnitnogo polya [On the principles of invariant measurements of the semiaxes of the full polarization ellipse of the magnetic field]: Geofiz. Apparatura, no. 31, p. 74-82, illus., 1967.

274-204 **Mizyuk, L. Ya.; Nichoga, V. A.** K raschetu dobrotnosti nizkochastotnykh induktsionnykh magnitopriyemnikov [On the calculation of the Q factor of low-frequency magnetic induction pickups], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 101-110, illus., table, 1965.

273-156 **Mkrtchyan, A. A.** K voprosu izucheniya na modelyakh vzaimodeystviya mezhdu fundamentom i osnovaniyem sooruzheniya [On the problem of model study of the interaction between a foundation and the substratum of a structure], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 58-66, illus., table, 1968.

Mladenović, Milan. See *Milovanovic, Branislav. 275-207*

Mlotek, V. I. See *Borodin, B. P. 265-646*

Mlotek, V. I. See *Tal'virskiy, D. B. 269-649*

273-157 **Mnatsakanyan, V. L.** Eksperimental'nyye issledovaniye raboty zhelezobetonnykh balok na modelyakh [Experimental investigations of the operation of ferroconcrete beams on models], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 67-77, illus., tables, 1968.

Moberly, Ralph, Jr. See *Malahoff, Alexander. 266-336*

Moczygemba, Max. See *Overton, Harold L. 270-470*

270-258 **Moe, Kenneth; Nebergall, Dean.** Variation of geomagnetic disturbance with latitude: Jour. Geophys. Research, v. 74, no. 5, p. 1305-1307, illus., 1969.

264-110 **Mogi, Kiyoo.** Migration of seismic activity [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 1, p. 53-74, illus., table, 1968.

266-126 **Mogi, Kiyoo.** Development of aftershock areas of great earthquakes [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 175-203, illus., 1968.

271-085 **Mogi, Kiyoo.** Sequential occurrences of recent great earthquakes: Jour. Physics Earth, v. 16, no. 1, p. 30-36, illus., 1968.

271–542 **Mogi, Kiyoo.** Source locations of elastic shocks in the fracturing process in rocks [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 1103-1125, illus., 1968.

268-169 **Mogilevskaya, S. Ye.** Issledovaniye fiziko-mekhanicheskikh svoystv i sostava rud i vmeshchayushchikh porod Sheregeshskogo mestorozhdeniya v svyazi s osobennostyami geologicheskogo stroyeniya [Investigation of the physicomechanical properties and composition of ores and country rocks of the Sheregesh deposit in relation to features of the geologic structure], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 265-270, illus., table, 1968.

Mohan, Indra. See *Gupta, Harsh. 275-090*

Moign, A. See *Babin, C. 274-456*

Moiseveya, G. P. See *Zotikov, I. A. 273-288*

266-400 **Moiseyenko, F. S.** Stroyeniye zemnoy kory yuzhnogo gornogo obramleniya Sibiri [Structure of the Earth's crust in the southern mountainous frame of Siberia], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 123-136, illus., 1967.

275-118 **Moiseyenko, F. S.** Nekotoryye cherty neotektoniki, rezul'taty i vozmozhnosti seysmogeologicheskikh issledovaniy v Altaye-Sayanskoy oblasti [Some features of the neotectonics, results and possibilities of seismogeologic investigations in the Altay-Sayan district (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 84-94, illus., 1969.

270-155 **Moiseyenko, U. I.; Istomin, V. Ye.; Aliyeva, M. A.** Vliyaniye temperatury i davleniya na nekotoryye fizicheskiye svoystva gornykh porod [The effect of temperature and pressure on some physical properties of rocks], *in* Simpozium po fizikomekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 148-152, illus., table, 1968.

272-239 **Moiseyenko, U. I.; Sokolova, L. S.** Ergebnisse geothermischer Untersuchungen in Sibirien [Results of geothermal investigations in Siberia]: Freiberger Forschungshefte C 238, p. 79-87, tables, 1968.

272-240 **Moiseyenko, U. I.** Wärmeleitfähigkeit der Gesteine bei hohen Temperaturen [Heat conductivity of rocks at high temperatures]: Freiberger Forschungshefte C 238, p. 89-94, illus., 1968.

270-393 **Moiseyev, O. N.** Ispol'zovaniye seysmicheskoy apparatury tipa Poisk-RNP dlya podavleniya regularnykh voln [Use of seismic apparatus of the Poisk-Controlled Direction Pickup type for the suppression of regular waves]: Geofiz. Apparatura, no. 35, p. 84-89, illus., 1968.

266-397 **Mokshantsev, K. B.; Gornshteyn, D. K.; Gudkov, A. A.; Gusev, G. S.; Den'gin, E. V.; Shtekh, G. I.** Glubinnoye stroyeniye vostochnoy chasti Sibirskoy platformy i prilegayushchikh skladchatykh sooruzheniy Verkhoyano-Chukotskoy oblasti [Deep structure of the eastern part of the Siberian platform and adjacent folded structures of the Verkhoyan-Chukot district]: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Yakut. Filial Inst. Geologii, 172 p., illus., 1968.

Mokshantsev, K. B. See *Makarov, K. K. 275-172*

271-572 **Molchanov, A. A.** Generator peremennogo toka dlya elektricheskogo karotazha [Alternating current generator for electrical logging]: Geofiz. Apparatura, no. 31, p. 130-133, illus., table, 1967.

273-363 **Molchanov, O. A.** Structure of the magnetic field in the magnetosphere during the recovery phase of a magnetic storm: Geomagnetism and Aeronomy, v. 8, no. 5, p. 693-697, illus., 1968.

268-014 **Molina Berbeyer, Rafael.** Determinación químico-analítica de estroncio y rubidio para el cálculo de edades geológicas (en los minerales lepidolita, muscovita, biotita y feldespato-potásico contenidos en las rocas) [Analytical chemical determination of strontium and rubidium for calculation of geologic ages (in the minerals lepidolite, muscovite, biotite and potassium feldspar in rocks)]: Soc. Quím. México Rev., v. 12, no. 3, p. 110A-112A, 1968.

Molina, F. See *Mariani, F. 265-414*

Moller, J. See *Ambach, W. 271-263*

Möller, Jörgen. See *Larsen, Ole. 273-022*

269-037 **Möller, P.; Wagener, K.** Dating soil layers by ^{10}Be, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 177-188, illus., tables, 1967.

274-283 **Molnar, Peter; Oliver, Jack.** Lateral variations of attenuation in the upper mantle and discontinuities in the lithosphere: Jour. Geophys. Research, v. 74, no. 10, p. 2648-2682, illus., tables, 1969.

267-171 **Molochnov, G. V.** Interpretatsiya magnitotelluricheskikh zondirovaniy s ispol'zovaniyem effektivnoy glubiny proniknoveniya elektromagnitnogo polya [Interpretation of magnetotelluric sounding using effective depth of penetration of the electromagnetic field]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 88-94, illus., 1968.

275-138 **Molotkov, I. A.; Zhuze, A. G.** Vliyaniye vertikal'noy granitsy v neodnorodnoy srede na rasprostraneniye voln Lyava [Effect of a vertical boundary in an inhomogeneous medium on the propagation of Love waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 3-7, 1969.

Molotkov, L. A. See *Krauklis, P. V. 267-629*

264-518 **Monastyrev, V. K.; Bobrovnik, I. I.; Konovalov, Yu. G.** K obosnovaniyu zondirovaniy metodom prelomlennykh voln dlya kartirovaniya poverkhnosti fundamenta Zapadno-Sibirskoy nizmennosti [Principles of sounding by the method of refracted waves for mapping the surface of the basement of the West Siberian Lowland]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 6-18, illus., 1964.

264-519 **Monastyrev, V. K.; Konovalov, Yu. G.; Bobrovnik, I. I.** K voprosu o tochechnykh zondirovaniyakh metodom prelomlennykh voln [Problem of the accuracy of sounding by the method of refracted waves]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 19-38, illus., 1964.

Monastyrev, V. K. See *Bobrovnik, I. I. 270-408*

272-186 **Money, P. L.** The Wollaston Lake fold-belt system, Saskatchewan-Manitoba: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1489-1504, illus., tables, 1968.

268-117 **Monge E., Joaquin; Rosenberg V., Luis A.; Vives E., Alberto; Yoma Y., Fortunato.** Sismo del 28 de marzo de 1965—Informe sobre daños en estructuras [Earthquake of March 28, 1965—Information on damage to structures]: Chile Univ. Fac. Cienc. Fis. y Mat. Anales, 1965-66, v. 22-23, p. 67-80, illus. [1967,].

267-290 **Mongelli, F.** Un metodo per la determinazione in laboratorio della conducibilita termica delle rocce [A method for determination in the laboratory of the thermal conductivity of rocks (with English abs.)]: Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 51-58, illus., tables, 1968.

Mongelli, F. See *Loddo, M. 267-624*

Mongelli, F. See *Loddo, M. 273-310*

273-311 **Mongelli, Francesco.** Metodi di misure geotermiche sui continenti con particolare riguardo alla prospezione [Methods of geothermal measurement on continents with particular regard to prospecting]: Bari Univ. Ist. Geodesia e Geofisica Pubb., no. 53, 60 p., 1967.

Monges Caldera, J. See *Woollard, G. P. 270-206*

Monges Caldera, J. See *Woollard, G. P. 271-270*

271-174 **Monin, I. F.** Pro vyznachennya fíhury Zemlí za anomalíyamy vertykal'noho hradíyenta syly tyazhínnya [On the determination of the figure of the Earch from anomalies of the vertical gradient of gravity (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovídí, ser. B, no. 4, p. 338-341, 1968.

271-175 **Monin, I. F.** Do vyznachennya fíhury Zemlí za anomalíyamy syly tyazhínnya [On the determination of the figure of the Earth from gravity anomalies (with Russian and English summ.)]: Akad. Nauk Ukrayin. RSR Dopovídí, ser. B, no. 5, p. 434-438, 1968.

275-016 **Monjuvent, Guy.** Datation par le radiocarbone dans une moraine locale des chaînes subalpines à Prélenfrey-du-Gua prés Grenoble (Isère) [Radiocarbon dating in a local moraine from a subalpine mountain range at Prélenfrey-du-Gua near Grenoble (Isère)]: Acad. Sci. Comptes Rendus, ser. D, v. 268, no. 10, p. 1372-1375, illus., 1969.

Monster, D. See *Thode, H. 275-293*

Monster, J. See *Thode, H. G. 266-414*

265-002 **Montané, Julio.** Paleo-Indian remains from Laguna de Tagua, central Chile: Science, v. 161, no. 3846, p. 1137-1138, illus., 1968.

Montel, J. See *Ravoire, J. 269-060*

Montgomery, D. R. See *Shoemaker, E. M. 275-071*

264-325 **Montgomery, Michael D.; Bame, S. J.; Hundhausen, A. J.** Solar wind measurements—Vela 4 measurements: Jour. Geophys. Research, v. 73, no. 15, p. 4999-5003, illus., 1968.

273-335 **Montgomery, Michael D.; Singer, S.** Penetration of solar energetic protons into the magnetotail: Jour. Geophys. Research, v. 74, no. 11, p. 2869-2880, illus., 1969.

Montigny, R. J. E. See *Faure, Gunter. 273-010*

264-007 **Moorbath, S.; Sigurdsson, H.; Goodwin, R.** K-Ar ages of the oldest exposed rocks in Iceland: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 197-205, illus., table, 1968.

Moorbath, S. See *Welke, H. 264-307*

267-016 **Moorbath, S.; Bell, K.; Leake, B. E.; McKerrow, W. S.** Geochronological studies in Connemara and Murrisk, western Ireland, *in* Radiometric dating for geologists (E. I. Hamilton and R. M. Farquhar, editors): London and New York, Interscience Publishers, p. 259-298, illus., 1968.

272-278 **Moorbath, S.; Welke, H.** Isotopic evidence for the continental affinity of the Rockall Bank, North Atlantic: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 211-216, illus., tables, 1968.

272-279 **Moorbath, S.; Welke, H.** Lead isotope studies on igneous rocks from the Isle of Skye, northwest Scotland: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 217-230, illus., tables, 1968.

Moore, Carleton, B. See *Buseck, Peter R. 266-049*

269-090 **Moore, Carleton B.; Gibson, Everett K.** Nitrogen abundances in chondritic meteorites: Science, v. 163, no. 3863, p. 174-176, illus., table, 1969.

Moore, Carleton B. See *Yates, Ann M. 271-039*

Moore, D. G. See *Stride, A. H. 270-355*

265-286 **Moore, David G.; Buffington, Edwin C.** Transform faulting and growth of the Gulf of California since the late Pliocene: Science, v. 161, no. 3847, p. 1238-1241, illus., 1968.

269-611 **Moore, David G.; Palmer, Harold D.** Offshore seismic reflection surveys, *in* Civil engineering in the oceans—ASCE Conf., San Francisco, Calif., 1967, Proc.: [New York] Am. Soc. Civil Engineers, p. 789-806, illus., 1968.

272-044 **Moore, H. J.** Subsurface deformation resulting from missile impact, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B107-B112, illus., table, 1969.

Moore, James G. See *Dalrymple, G. Brent. 265-001*

275-420 **Moore, James G.; Fiske, Richard.** Volcanic substructure inferred from dredge samples and ocean-bottom photographs, Hawaii: Geol. Soc. America Bull., v. 80, no. 7, p. 1191-1201, illus., tables, 1969.

267-091 **Moore, P.** Lunar surface characteristics, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 185-188, 1967.

269-367 **Moore, Paul B.; Smith, Joseph V.** High pressure modification of Mg$_2$SiO$_4$—Crystal structure and crystallochemical and geophysical implications: Nature, v. 221, no. 5181, p. 653-655, illus., table, 1969.

270-115 **Moore, R. K.; Waite, W. P.; Lundien, J. R.; Masenthin, H. W.** Radar scatterometer data analysis techniques, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 765-780, illus., tables, 1968.

Moore, R. K. See *Rouse, John Wilson, Jr. 274-169*

267-003 **Moore, W. J.; Lanphere, M. A.; Obradovich, J. D.** Chronology of intrusion, volcanism, and ore deposition at Bingham, Utah: Econ. Geology, v. 63, no. 6, p. 612-621, illus., tables, 1968.

269-375 **Moore, Willard S.** Measurement of Ra-228 and Th-228 in sea water: Jour. Geophys. Research, v. 74, no. 2, p. 694-704, illus., tables, 1969.

Moores, Eldridge M. See *Burk, Creighton A. 266-290*

267-119 **Morelli, C.; Bellemo, S.; Visintini, G. de.** Non-directional travel-time anomalies for European stations [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 38, p. 164-180, illus., tables, 1968.

Morelli, C. See *Gantar, C. 267-257*

268-285 **Morelli, C.** Gravimetricheskiye izmereniya na poverkhnostnykh sudakh [Gravimetric measurements on surface ships], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 178-193, illus., table, 1967.

269-662 **Morelock, Jack.** Shear strength and stability of continental slope deposits, western Gulf of Mexico: Jour. Geophys. Research, v. 74, no. 2, p. 465-482, illus., table, 1969.

Morgan, J. W. See *Green, D. H. 264-292*

269-096 **Morgan, J. W.; Lovering, J. F.** Uranium and thorium abundances in chondritic meteorites: Talanta, v. 15, no. 11, p. 1079-1095, illus., tables, 1968.

271-186 **Morgan, W. Jason; Vogt, Peter R.; Falls, Darrell F.** Magnetic anomalies and sea-floor spreading on the Chile Rise: Nature, v. 222, no. 5189, p. 137-142, illus., 1969.

272-509 **Morgenstern, N. R.; Tamuly Phukan, A. L.** Non-linear stress-strain relations for a homogeneous sandstone: Internat. Jour. Rock Mechanics and Mining Sci., v. 6, no. 2, p. 127-142, illus., 1969.

265-640 **Mori, Kiyoshi.** Some aspects of marine sonic prospecting—On the effect of frequency control [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 1, p. 25-29, illus., 1968.

264-112 **Morimoto, Ryohei.** Geologic background of the Niigata earthquake, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 9-31, illus., tables, 1968.

270-455 **Morimoto, Ryohei; Ossaka, Joyo; Hatori, Tokutaro; Izutsuya, Sadakatsu; Urabe, Kazunori; Takahashi, Haruo; Okada, Yoshimitsu; Hirabayashi, Jun'ichi; Isa, Kyozo; Isobe, Hiroshi.** The upheaval of an insular volcano Iwo-Jima, Ogasawara Islands and its recent state of activity [in Japanese with English summ.]: Jour. Geography, v. 77, no. 5(766), p. 255-283, illus., tables, 1968.

Morishita, Toshizo. See *Kanai, Kiyoshi. 266-140*

267-206 **Moritz, H.** Mass distributions for the equipotential ellipsoid [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 59-65, 1968.

271-282 **Moritz, H.** On the computation of the deflection of the vertical [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 326-331, 1968.

264-208 **Moritz, Helmut.** Linear solutions of the geodetic boundary-value problem: Deutsch. Geod. Komm. Veröffentl., ser. A, no. 58, 107 p., illus., 1968.

264-209 **Moritz, Helmut.** Kinematical geodesy: Deutsch. Geod. Komm. Veroffentl., ser. A, no. 59, 55 p., illus., 1968.

273-228 **Moritz, Helmut.** Sur la répartition de densité à l'intérieur de l'éllipsoïde équipotentie [On the density distribution in the interior of the equipotential ellipsoid (with English and German abs.)]: Bull. Géod., no. 91, p. 81-93, 1969.

273-292 **Moritz, Helmut.** Accuracy of mean gravity anomalies obtained from point and profile measurements: Acad. Sci. Fennicae Annales, ser. A-3, no. 76, 16 p., tables, 1964.

271-203 **Morkovkina, V. F.** Rol' tektoniki i metasomaticheskikh protsessov v formirovanii giperbasitovykh poyasov skladchatykh oblastey (na primere Polyarnogo Urala) [The role of tectonics and metasomatic processes in the formation of the ultramafic belts of folded regions (illustrated by the Polar Urals) (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 26-31, 1968.

267-580 **Morlet, J.** Les ordinateurs en sismique [The computers in seismics], *in* Les ordinateurs en geologie, petroliere et dans les études de production: Paris, Inst. Français Petrole (Collection Colloques et Séminaires 7), p. 81-89, illus., 1968.

265-458 **Morley, L. W.; MacLaren, A. S.; Charbonneau, B. W.** Magnetic anomaly map of Canada: Canada Geol. Survey Map 1255A, scale 1:5,000,000, text, 1968.

269-156 **Moroz, V. I.** Polosy CO$_2$ i nekotoryye opticheskiye svoystva atmosfery Venery [CO$_2$ bands and some optical properties of the atmosphere of Venus (with English summ.)]: Astron. Zhur., v. 44, no. 4, p. 816-827, illus., tables, 1967.

Morozov, A. A. See *Borodin, P. M. 264-430*

Morozov, A. A. See *Cherkasov, I. I. 265-099*

Morozov, G. V. See *Shovkoplyas, V. M. 273-313*

Morozov, M. D. See *Brodovoy, V. V. 268-195*

Morozov, M. D. See *Brodovoy, V. V. 269-279*

275-182 **Morozov, M. D.; Bakzhanov, G. R.; Gavelyan, A. P.; Benevolenskiy, I. P.; Tret'yakov, V. G.** Razvitiye geofizicheskikh issledovaniy v Kazakhstane [Development of geophysical investigations in Kazakhstan]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 2, p. 72-79, 1969.

270-512 **Morozov, S. G.; Chibrikova, Ye. V.; Chagayev, A. Ya.** Nizhnedevonskiye-siluriyskiye otlozheniya Yuryuzano-Ayskoy vpadiny i perspektivy ikh neftegazonosnosti [Lower Devonian-Silurian formations of the Yuryuzano-Aysk basin and their oil and gas possibilities]: Geologiya Nefti i Gaza, no. 11, p. 38-41, illus., 1968.

272-037 **Morozov, S. G.; Revenko, E. A.** O vozraste karbonatnykh tolshch Bavlinskikh otlozheniy Bashkirii [On the age of the carbonate series of the Bavly formations of Bashkiria]: Akad. Nauk SSSR Doklady, v. 184, no. 4, p. 917-920, illus., 1969.

Morozova, G. M. See *Izyumov, I. F. 266-237*

Morozova, G. M. See *Kaufman, A. A. 267-190*

Morozova, I. M. See *Gerling, E. K. 269-067*

Morozova, I. M. See *Levskiy, L. K. 274-072*

270-085 **Morozova, R. N.; Shebalin, N. V.** O zemletryaseniyakh Kryma 1800-1967 gg. (opyt kriticheskogo kataloga) [On earthquakes in Crimea in 1800-1967 (attempt at a critical catalog) (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 13-41, illus., tables, 1968.

272-542 **Morris, Billy P.; Cocanower, R. D.** Computers—To increase the value of temperature logs, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. R1-R21, illus., 1968.

Morris, E. C. See *Shoemaker, E. M. 268-078*

269-150 **Morris, E. C.** Close range geologic investigation of the lunar surface with Surveyor television pictures, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 13, Other subjects: Prague, Academia, p. 75-109, illus., 1968.

Morris, E. C. See *Shoemaker, E. M. 275-071*

Morris, Gerald B. See *Helmberger, Donald V. 269-594*

Morris, R. L. See *Tixier, M. P. 270-487*

270-045 **Morrison, David.** Venus—Absence of a phase effect at a 2-centimeter wavelength: Science, v. 163, no. 3869, p. 815-816, illus., 1969.

Morrison, David. See *Sagan, Carl. 270-058*

Morrison, F. See *Hotine, M. 273-226*

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266-569 **Morvai, László.** Szelektiv gamma-gamma módszer alkalmazása érckutató fúrásban [Application of the selective gamma-gamma method to ore-prospecting boreholes (with Russian and English summ.)]: Magyar Geofizika, v. 9, no. 3, p. 105-112, illus., 1968.

271-002 **Mose, Douglas G.; Bickford, M. E.** Precambrian geochronology in the Unaweep Canyon, west-central Colorado: Jour. Geophys. Research, v. 74, no. 6, p. 1677-1687, illus., tables, 1969.

Mosetti, F. See *Carrozzo, M. T. 271-279*

Mosetti, Ferruccio. See *Nicolich, Rinaldo. 268-412*

271-372 **Mosiyenko, B. A.** Modernizatsiya magnitometra M-14 dlya izmereniya ostatochnoy namagnichennosti [Modernization of the M-14 magnetometer for measuring remanent magnetization]: Geofiz. Apparatura, no. 31, p. 176-180, 1967.

267-284 **Moskaleva, S. V.** O geologicheskoy interpretatsii geofizicheskikh dannykh nad giperbasitovymi telami s svyazi s problemoy glubinnogo stroyeniya Urala [On the geologic interpretation of geophysical data on ultramafic bodies in connection with the problem of the deep structure of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 210-220, illus., tables, 1968.

267-334 **Moskaleva, S. V.** Problema verkhney mantii na Urale [The problem of the upper mantle in the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 221-227, 1968.

Moskaleva, S. V. See *Demenitskaya, R. M. 273-278*

269-618 **Moss, F. J.** Observations on the use of the "Vibroseis" method, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no 26, p. 511-523, illus., table, 1967.

Moss, George J., Jr. See *Key, Charles R. 270-430*

Moss, R. W. See *Vali, V. 266-257*

266-322 **Mossakovskiy, A. A.** K voprosu ob orogennom etape razvitiya geosinklinal'nykh oblastey [On the problem of the orogenic stage of development of geosynclinal regions]: Geotektonika, no. 2, p. 3-16, table, 1965.

271-208 **Mossakovskiy, A. A.** Tektonika i vulkanizm orogennogo etapa razvitiya geosinklinal'nykh oblastey [Tectonics and volcanism of the orogenic stage of evolution of geosynclinal regions (with English summ.)], *in* Internat. Geol. Cong., 23d Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanism i Tektogenez: Moscow Izdatel'stvo "Nauka," p. 100-107, illus., 1968.

Motojima, Isao. See *Yahagi, Fumiya. 273-182*

Motta, G. See *Schreiber, B. 274-411*

273-297 **Mottlová, Ludmila.** Deep subsurface structures of the Moldanubicum, on th basis of gravity anomalies: [Czechoslovakia] Ustred. Ustav. Geol. Sbornik, v. 43 no. 1, p. 37-44, illus., tables, 1968.

Moumoulidis, G. See *Papazachos, B. 265-124*

Moumoulidis, G. See *Comninakis, P. 274-121*

264-203 **Mourad, A. G.** The concept of marine geodesy, *in* Marine geodesy symposium 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 27-35, illus., 1967.

269-302 **Moussa, Mounir T.** Gravitational gliding in the Flagstaff Formation near Soldie Summit, Utah: Brigham Young Univ. Geology Studies, v. 15, pt. 1, p. 77-84, illus 1968.

Mouzo, Félix. See *Urien, Carlos M. 271-546*

Movchan, A. A. See *Zharkov, V. N. 273-134*

Movchan, A. I. See *Zharkov, V. N. 273-134*

266-557 **Moxham, R. M.** Changes in surface temperature at Taal Volcano, Philippine 1965-1966: Bull. Volcanol., v. 31, p. 215-234, illus., tables, 1968.

272-264 **Mozami-Goudarzi, K.** La dispersion des ondes de Rayleigh et les structures de la croute et du manteau superieur entre Limousin et Morvan [Dispersion of Rayleigh waves and the structures of the crust and of the upper mantle between Limousin and Morvan (with English abs.)]: Annales Geophysique, v. 24, no. 4, p. 923-953, illus., tables, 1968.

267-249 **Mudge, Melville R.; Erickson, Ralph L.; Kleinkopf, Dean.** Reconnaissance geology, geophysics, and geochemistry of the southeastern part of the Lewis and Clark Range, Montana: U.S. Geol. Survey Bull. 1252-E, p. E1-E35, illus., tables, 1968.

Mudie, John D. See *Luyendyk, Bruce P. 266-484*

273-294 **Mueller, Ivan I.** Interpolation of deflections of the vertical by means of a torsion balance: Acad. Sci. Fennicae Annales, ser. A-3, no. 78, 6 p., illus., 1964.

264-048 **Mueller, O.; Gentner, W.** Gas content in bubbles of tektites and other natural glasses: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 406-410, illus., table, 1968.

266-076 **Mueller, Robert F.** Sources of HCl and HF in the atmosphere of Venus: Nature, v. 220, no. 5162, p. 55-57, illus., tables, 1968.

271-043 **Mueller, Robert F.** Planetary probe—Origin of atmosphere of Venus: Science, v. 163, no. 3873, p. 1322-1324, illus., 1969.

265-362 **Mueller, St.; Peterschmitt, E.; Fuchs, K.; Ansorge, J.** The rift structure of the crust and upper mantle beneath the Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 108-113, illus., 1967.

Muffler, L. J. P. See *Clayton, R. N. 268-355*

265-009 **Muffler, L. J. Patrick; Doe, Bruce R.** Composition and mean age of detritus of the Colorado River Delta in the Salton Trough, southeastern California: Jour. Sed. Petrology, v. 38, no. 2, p. 384-399, illus., tables, 1968.

268-082 **Muhleman, D. O.; Brown, W. E., Jr.; Davids, L.; deWys, J. Negus.** Lunar surface electromagnetic properties, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 209-239, illus., 1968.

275-075 **Muhleman, D. O.; Brown, W. E., Jr.; Davids, L.; Peake, W. H.; deWys, J. Negus.** Lunar surface electromagnetic properties, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 245-301, illus., 1969.

270-119 **Muir, Allan H.; Sattinger, Irvin J.** Methods of feasibility and economic analysis of remote sensing applications, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 927-939, illus., 1968.

Muirhead, K. J. See *Cleary, J. R. 266-181*

Muirhead, K. J. See *Wright, C. 273-315*

267-094 **Mukhamedzhanov, A. K.; Stanyukovich, K. P.** Meteority sozdali rel'yef Luny [Meteorites have created the relief of the Moon]: Priroda, no. 7, p. 26-34, illus., table, 1968.

266-188 **Mukherjee, Sunita.** Note on the propagation of waves in infinite spherically-aeolotropic medium produced by a blast in a spherical cavity: Pure and Appl. Geophysics, v. 70, no. 2, p. 39-46, illus., 1968.

268-154 **Mukhopadhyay, Arabinda.** On the stresses produced in a transversely isotropic medium by normal and tangential forces on a moving strip of finite width: Gerlands Beitr. Geophysik, v. 77, no. 4, p. 321-330, illus., 1968.

Mulder, F. G. See *Priem, H. N. A. 269-012*

Mullen, J. P. See *Aarons, J. 267-417*

266-409 **Müller, E. P.; Theilig, F.** Die isotope Zusammensetzung des Kohlenstoffs in Sedimenten des Perms und ihre Bedeutung fur die Fazies [The isotopic composition of the carbon in Permian sediments and their significance for facies (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 5, p. 250-257, illus., tables, 1968.

265-372 **Müller, E. Peter; Wienholz, Roland.** Isotopengeochemie und Erdölgenese [Isotope geochemistry and petroleum genesis (with English and Russian summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 4, p. 176-182, illus., 1968.

265-630 **Müller, Gerhard; Gees, Rudolf A.** Erste Ergebnisse reflexionsseismischer Untersuchungen des Bodensee-Untergrundes [First results of seismic reflection investigations of the ground under Lake Constance]: Neues Jahrb. Geologie u. Palaontologie Monatsh., no. 6, p. 364-369, illus., 1968.

Müller, Karel. See *Homola, Vladimir. 270-280*

265-086 **Müller, O.** Die chemische Zusammensetzung des Steinmeteoriten St. Severin [The chemical composition of the St. Severin stone meteorite (with English abs.)]: Zeitschr. Naturforschung, v. 23a, no. 1, p. 48-51, tables, 1968.

Müller, O. See *Kirsten, T. 265-374*

Muller, O. See *Kirsten, T. 269-050*

Müller, P. See *Harre, W. 273-038*

264-067 **Muller, P. M.; Sjogren, W. L.** Mascons—Lunar mass concentrations: Science, v. 161, no. 3842, p. 680-684, illus., tables, 1968.

275-167 **Müller, Pál.** A magyar Geofizikusok Egyesülete Elnökségének Beszámolója a magyar geofizikai kutatások újabb eredményeiröl [The report of the Presidium of the Hungarian Geophysical Society on recent results of Hungarian geophysical investigations (with Russian and German translation)] Magyar Geofizika, v. 10, no. 1, p. 3-20, 1969.

267-072 **Müller, W. F.; Défourneaux, M.** Deformationsstrukturen in Quarz als Indikator für Stosswellen—Eine experimentelle Untersuchung an Quarz-Einkristallen [Deformation structures in quartz as an indicator of shock waves—An experimental investigation on quartz single crystals (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 5, p. 483-504, illus., table, 1968.

268-037 **Müller, W. F.; Hornemann, U.** Deformation microstructures in shock-loaded olivine: Nature, v. 220, no. 5173, p. 1227-1228, illus., 1968.

Mumladze, G. V. See *Balavadze, B. K. 273-275*

272-216 **Mumme, I. A.** Crustal thickness measurements in the south east of South Australia based on the regional gravity values: Royal Soc. South Australia Trans. 1967, v. 91, p. 31-35, tables, 1967.

272-478 **Mumme, I. A.** On the radioactivity and related fluorescent properties of sedimentary Australian zircons: Royal Soc. South Australia Trans. 1967, v. 91, p. 27-29, table, 1967.

265-317 **Mundt, Wolfgang.** Anwendung statistischer Verfahren in der Magnetik und Gravimetrie zur Tiefenerkundung [Application of statistical procedures to magnetics and gravimetry for exploring at depth (with English summ.)]: Pure and Appl. Geophysics, v. 69, p. 143-157, illus., 1968.

Mundt, Wolfgang. See *Kautzleben, Heinz. 274-328*

Munk, W. See *Houtermans, J. 269-028*

266-411 **Munnich, K. O.** Isotopen-Datierung von Grundwasser [Isotopic dating of ground water]: Naturwissenschaften, v. 55, no. 4, p. 158-163, illus., 1968.

Munnich, O. See *Shata, A. 267-026*

Munroe, Robert J. See *Sass, J. H. 264-280*

Munsart, Craig A. See *Newman, Walter S. 267-605*

264-100 **Munuera, J. M.** Dos secuencias de sismos Ibericos, posiblemente de foco intermedio [Two Iberian earthquake sequences, possibly of intermediate focus (with English summ.)]: Rev. Geofisica, v. 25, nos. 99-100, p. 167-185, illus., tables, 1966.

265-116 **Munuera, J. M.** Energy release and seismic flux: Annali Geofisica, v. 18, no. 3, p. 209-262, illus., tables, 1965.

265-126 **Munuera, J. M.** Iberian seismicity, 1961-1965: Annali Geofisica, v. 20, no. 2, p. 143-169, illus., tables, 1967.

Muralli, A. V. See *Lal, D. 269-093*

Muraour, P. See *Leveque, P. 271-514*

Murashov, V. I. See *Sharifkulov, K. S. 269-702*

Murata, Hiroharu. See *Nakagawa, Kyoji. 268-143*

275-272 **Murata, K. J.; Friedman, Irving; Madsen, Beth M.** Isotopic composition of diagenetic carbonates in marine Miocene formations of California and Oregon: U.S. Geol. Survey Prof. Paper 614-B, p. B1-B24, illus., tables, 1969.

Murata, Katsuyuki. See *Endo, Gensuke. 265-233*

Muratov, A. A. See *Valuyskiy, A. A. 270-517*

264-228 **Muratov, M. V.; Neprochnov, Yu. P.** Stroyeniye dna Chernomorskoy kotloviny i yeye proiskhozhdeniye [Structure of the floor of the Black Sea Trench and its origin]: Moskov. Obshch. Ispytateley Prirody Byull., Otdel Geol., no. 5, p. 40-58, illus., 1967.

268-233 **Muratov, M. V.** The role of magmatism in the development of geosynclinal systems, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 243-253, 1968.

Muratov, M. V. See *Khain, V. E. 269-312*

271-201 **Muratov, M. V.** Rol' magmatizma v razvitii geosinklinal'nykh sistem [The role of magmatism in the development of geosynclinal systems (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 11-20, 1968.

Murauchi, S. See *Rikitake, T. 265-357*

Murauchi, S. See *Den, N. 271-506*

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Murauchi, Sadanori. See *Hashizume, Michio. 272-269*

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274-465 **Murdmaa, I. O.; Bezrukov, P. L.; Zenkevich, N. L.; Prokoptsev, N. G.; Repechka, M. A.** Izverzheniye podvodnogo vulkana Metis v arkhepelage Tonga i yego vliyaniye na osadkoobrazovaniye [Eruption of the submarine volcano Metis in the Tonga Archipelago and its effect on sedimentation]: Akad. Nauk SSSR Doklady, v. 185, no. 5, p. 1149-1152, illus., table, 1969.

274-093 **Murdock, James N.** Short-term seismic activity in the central Aleutian region: Seismol. Soc. America Bull., v. 59, no. 2, p. 789-797, illus., tables, 1969.

268-434 **Muriedas Pavón, Alfonso.** La exploración de areas nuevas por el método aeromagnético [Exploration of new areas by the aeromagnetic method]: Asoc. Mexicana Geofísicos Explor. Bol., v. 7, no. 4, p. 245-269, illus., 1966.

265-056 **Murina, G. A.** Osnovnye dostizheniya v oblasti argonovogo metoda opredeleniya vozrasta [Fundamental achievements in argon age determination], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 16-21, illus., 1967.

265-059 **Murina, G. A.** Nekotoryye voprosy metodiki opredeleniya argona ob'yemnym metodom [Some problems of the method of argon determination by the volumetric method], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 34-45, illus., 1967.

265-063 **Murina, G. A.** Otsenka nadezhnosti eksperimental'nykh dannykh metodami matematicheskoy statistiki [Evaluation of experimental data by methods of mathematical statistics], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 84-92, 1967.

Muroi, Isao. See *Kato, Yoshio. 268-426*

Murova, E. V. See *Lyubavin, L. M. 275-153*

Murphy, Anabeth. See *Rinehart, John S. 269-178*

Murray, J. B. See *Guest, J. E. 271-045*

Murtaugh, J. G. See *Faure, Gunter. 273-010*

271-064 **Murthi, N. G. K.** The Koyna earthquake: Indian Geophys. Union Jour., v. 5, no. 1, p. 11-14, illus., 1968.

269-431 **Murthy, G. S.; Fahrig, W. F.; Jones, D. L.** The paleomagnetism of the Michikamau anorthositic intrusion, Labrador: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1139-1144, illus., tables, 1968.

274-262 **Murthy, I. V. Radhakrishna.** Interpretation of gravity anomalies of dykes by pseudo-magnetic transformation: Pure and Appl. Geophysics, v. 73, p. 43-46, 1969.

267-350 **Murthy, V. Rama; Beiser, E.** Strontium isotopes in ocean water and marine sediments: Geochim. et Cosmochim. Acta, v. 32, no. 10, p. 1121-1126, illus., tables, 1968.

274-408 **Murty, C. S.** Studies on microseisms in relation to weather disturbances: [India] Nat. Geophys. Research Inst. Bull., v. 5, no. 3, p. 85-91, illus., table, 1967.

273-497 **Murty, T. S.** Thermal convection in vertical tubes with application to geysers: Tellus, v. 21, no. 1, p. 54-63, illus., tables, 1969.

266-528 **Murusidze, G. Ya.; Chichinadze, V. K.** O nekotorykh osobennostyakh primeneniya seysmicheskikh metodov razvedki dlya izucheniya margantsevykh mestorozhdeniy plastovogo tipa [On some features of the application of seismic survey methods to study manganese deposits of layered type]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 43-52, illus., 1966.

274-307 **Murzayev, P. M.; Mamchur, G. P.** Prostranstvennyye izmeneniya δC-13 seronosnykh izvestnyakov Predkarpat'ya [Spatial variations of δC-13 of the sulfur-bearing limestones of Ciscarpathia]: Akad. Nauk SSSR Doklady, v. 183, no. 4, p. 931-934, 1968.

Musatov, A. A. See *Cherkasov, I. I. 268-100*

Musatov, D. I. See *Dashkevich, N. N. 269-340*

265-609 **Musgrave, A. W.; Hicks, W. G.** Outlining shale masses by geophysical methods, *in* Diapirism and diapirs—A symposium: Am. Assoc. Petroleum Geologists Mem. 8, p. 122-136, illus., 1968.

Mushen'kin, B. P. See *Krylov, S. V. 269-633*

264-503 **Mushin, I. A.** Opyt primeneniya sinteticheskoy zapisi MRNP pri rabotakh v Bashkirii [Attempt to use synthetic records of controlled directional pickup in working in Bashkiria]: Razved. Geofizika, no. 23, p. 21-27, illus., 1967.

Mushin, I. A. See *Shevchenko, L. B. 269-638*

Musin, M. Kh. See *Begautdinov, A. K. 265-680*

Musin, M. Kh. See *Bagautdinov, A. K. 271-568*

264-400 **Mussett, A. E.; Reilly, T. A.; Raja, P. K. S.** Palaeomagnetism in east Africa, *in* Report on the geology and geophysics of the east African rift system: [Nairobi], East Africa Comm. Coop. Geophysics, p. 83-94, illus., 1965.

265-037 **Mussett, Alan E.; Dalrymple, G. Brent.** An investigation of the source of air Ar contamination in K-Ar dating: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 422-426, table, 1968.

268-647 **Mustafayev, K. A.; Akhmedov, A. K.; Grossgeym, A. V.; Kurbanov, R. K.** O dinamicheskikh osobennostyakh seysmicheskikh voln pri skvazhinnykh nablyudeniyakh [On the dynamic features of seismic waves in borehole observations]: Akad. Nauk Azerbaydzhan. SSR Izv. Nauk o Zemle, no. 3, p. 40-45, illus., 1968.

Mustonen, E. D. See *Sass, J. H. 272-227*

268-652 **Muzyukin, L. V.; Sen'ko-Bulatnyy, I. N.** Opyt primeneniya aktivatsionnogo karotazha na mestorozhdeniyakh margantsa Urala [Attempt to apply activation logging to the manganese deposits of the Urals], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 77-82, illus., 1967.

270-076 **Myers, N. O.** An earthquake alarm, *in* Short papers from the Vulcanological Observatory, Rabaul, New Britain: Australia Bur. Mineral Resources, Geology and Geophysics Rept., no. 107, p. 40-42, illus., 1967.

Myers, W. Bradley. See *Hamilton, Warren B. 266-289*

Mysina, L. G. See *Konstantinova, A. G. 273-149*

265-426 **Myukhkyurya, V. I.** Kompensator magnitnykh pomekh, sozdavayemykh elektropoyezdami [A compensator for magnetic interference created by electric trains]: Geofiz. Apparatura, no. 27, p. 82-92, illus., 1966.

271-359 **Myukhkyurya, V. I.** Komponentnyy protonnyy magnitometr [The component proton magnetometer]: Geofiz. Apparatura, no. 31, p. 20-30, illus., 1967.

Naake, Lothar. See *Dassler, Hans-Jurgen. 270-133*

270-135 **Naake, Lothar; Porstendorfer, Evamaria; Porstendorfer, Gottfried.** Synthetische magneto-tellurische Sondierungskurven aus elektrischen Bohrlochmessungen [Synthetic magnetotelluric sounding curves from electrical logging measurements]: Freiberger Forschungshefte, C 233, p. 51-54, illus., tables, 1968.

270-136 **Naake, Lothar; Porstendorfer, Evamaria; Porstendorfer, Gottfried.** Der Einfluss dünner, sehr gut leitender graphitischer Schichten in Sedimentkomplexen auf magneto-tellurische Sondierungskurven [The effect of thin, highly-conducting graphitic layers in sedimentary complexes on magnetotelluric sounding curves]: Freiberger Forschungshefte, C 233, p. 55-57, illus., tables, 1968.

271-122 **Nabetani, S.; Rankin, D.** An inverse method of magnetotelluric analysis for a multilayered Earth: Geophysics, v. 34, no. 1, p. 75-86, illus., 1969.

Nabetani, Sachio. See *Rankin, David. 272-171*

274-079 **Nadolski, Michael E.** Architectural damage to residential structures from seismic disturbances: Seismol. Soc. America Bull., v. 59, no. 2, p. 487-502, illus., tables, 1969.

269-002 **Naeser, C. W.; Faul, H.** Fission-track annealing in apatite and sphene: Jour. Geophys. Research, v. 74, no. 2, p. 705-710, illus., 1969.

267-314 **Nafe, John E.; Drake, Charles L.** Physical properties of rocks of basaltic composition, *in* Basalts—The Poldervaart treatise on rocks of basaltic composition, V. 2 (H. H. Hess and A. Poldervaart, editors): New York and London, Interscience Publishers, p. 483-502, illus., table, 1968.

Nafe, John E. See *Drake, Charles L. 268-314*

265-145 **Nag, S. K.** Travel times of P and S waves in the Indian subcontinent, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 62-68, illus., tables, 1966.

272-127 **Nagamune, Tomeo.** The earthquake of November 4, 1967, near Lake Kuttyaro, eastern Hokkaido—Traveltime analyses for body waves [in Japanese]: Zisin, ser. 2, v. 21, no. 3, p. 237-240, illus., table, 1968.

269-082 **Nagasawa, Riki.** K-Ar dating on the granitic rocks near Agematsu Town, Nagano Prefecture [in Japanese with English abs.]: Japanese Assoc. Mineralogists, Petrologists and Econ. Geologists Jour., v. 60, no. 3, p. 93-101, illus., tables, 1968.

264-336 **Nagata, T.; Fukunishi, H.** Dependence on geomagnetic activity of magnetic pulsation frequency of pc-3 and pc-4 ranges: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 69-78, illus., tables, 1968.

Nagata, T. See *Ozima, M. 264-404*

Nagata, T. See *Ozima, M. 264-406*

268-414 **Nagata, T.; Carleton, B. J.** Notes on piezo-remanent magnetization of igneous rocks: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 115-127, illus., tables, 1968.

Nagata, T. See *Kono, M. 268-420*

Nagata, T. See *Larson, E. 273-379*

275-334 **Nagata, T.; Carleton, B. J.** Notes on piezo-remanent magnetization of igneous rocks, [Pt.] 2: Jour. Geomagnetism and Geoelectricity, v. 21, no. 1, p. 427-445, illus., tables, 1969.

Nagata, Takesi. See *Kaneoka, Ichiro. 264-036*

Nagata, Takesi. See *Fukushima, Naoshi. 265-405*

Nagata, Takesi. See *Iijima, Takesi. 269-402*

Nagata, Takesi. See *Sugiura, Masahisa. 273-360*

271-218 **Nagibina, M. S.** Ob evolyutsii tektonicheskikh usloviy proyavleniya granitoidnogo magmatizma v protsesse razvitiya struktury zemnoy kory [On the evolution of the tectonic conditions of manifestation of granitoid magmatism during the evolution of crustal structure (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 216-222, 1968.

264-107 **Nagumo, Shozaburo; Hoshino, Kazuo.** Occurrence of micro-fracturing shocks during rock deformation with a special reference to activity of earthquake swarms [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 1295-1311, illus., table, 1967.

264-121 **Nagumo, Shozaburo.** Field investigations of earthquake phenomena, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 157-173, illus., 1968.

271-076 **Nagumo, Shozaburo; Kobayashi, Heihachiro; Koresawa, Sadayuki.** Improvements of ocean-bottom seismograph—Construction of a long-life magnetic tape recorder [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 861-875, illus., tables, 1968.

271-077 **Nagumo, Shozaburo; Kobayashi, Heihachiro; Koresawa, Sadayuki.** Sea-bottom seismic observation at Sagami Bay—[Pt.] 1, Seismic activity [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 877-888, illus., tables, 1968.

Nagy, Bartholomew. See *Engel, Albert E. J. 264-002*

265-084 **Nagy, Bartholomew.** Carbonaceous meteorites: Endeavour, v. 27, no. 101, p. 81-86, illus., table, 1968.

Nagy, Lois Anne. See *Engel, Albert E. J. 264-002*

Nagy, Zoltán. See *Adam, Antal. 270-138*

265-451 **Naidu, Prabakar S.** An example of linear filtering in aeromagnetic interpretation: Geophysics, v. 33, no. 4, p. 602-612, illus., 1968.

264-279 **Naidu, Prabhakar.** Statistical analysis of East Pacific Rise heat flow data: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 131-134, illus., 1968.

274-275 **Naidu, Prabhakar S.** Analysis of scatter in the oceanic heat flow data: Royal Astron. Soc. Geophys. Jour., v. 17, no. 4, p. 353-368, illus., tables, 1969.

272-167 **Nair, M. Ramachandran; Biswas, S. K.; Mazumdar, K.** Experimental studies on the electromagnetic response of tilted conducting half-planes to a horizontal-loop prospecting system: Geoexploration, v. 6, no. 4, p. 207-244, illus., 1968.

268-403 **Nairn, A. E. M.** Evidence of latitude from Permian paleomagnetic data, *in* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 550-558, 578, illus., tables, 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'stvo "Mir," p. 346-356, illus., tables, 1968.

272-361 **Nairn, A. E. M.; Westphal, M.** Possible implications of the palaeomagnetic study of late Palaeozoic igneous rocks of northwestern Corsica: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 5, no. 2, p. 179-204, illus., table, 1968.

265-396 **Nakada, M. P.; Singer, S. F.** Thermal diffusion and multiply-charged atoms in the magnetosphere: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 163-181, illus., 1968.

Nakagawa, Hisao. See *Kano, Hiroshi. 265-140*

275-332 **Nakagawa, Hisao; Niitsuma, Nobuaki; Hayasaka, Isao.** Late Cenozoic geomagnetic chronology of the Boso Peninsula [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 75, no. 5, p. 267-280, illus., 1969.

Nakagawa, Ichiro. See *Mikumo, Takeshi. 271-111*

268-143 **Nakagawa, Kyoji; Murata, Hiroharu; Calero, Celso.** Preliminary study on modal analysis of response of a structure subjected to two different earthquake motions as its two supporting points: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 127-138, illus., tables, 1967.

265-237 **Nakahara, Toshiaki.** A calculation method of relative complex resistivity by an infinite series for horizontally layered earth models [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 1, p. 43-46, 1968.

Nakamura, Masao. See *Watanabe, Hikaru. 272-266*

266-564 **Nakamura, Masato.** On the volcanic products and history of Kaimon-dake Volcano [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 12, no. 3, p. 119-131, illus., tables, 1968.

275-050 **Nakamura, Yosio; Latham, Gary V.** Internal constitution of the Moon—Is the lunar interior chemically homogeneous,: Jour. Geophys. Research, v. 74, no. 15, p. 3771-3780, illus., tables, 1969.

Nakanishi, Nobuhiro. See *Yamasaki, Masao. 266-566*

Nakanishi, Takashi. See *Sakanoue, Masanobu. 269-383*

Nakanishii, Nobuhiro. See *Yamasaki, Masao. 273-498*

265-301 **Nakano, Takamasa; Kadomura, Hiroshi; Matsuda, Iware.** Buried landforms and ground subsidence in the Tokyo Lowland [in Japanese with English summ.]: Geog. Rev. Japan, v. 41, no. 7, p. 427-449, illus., tables, 1968.

267-228 **Nakata, Takashi.** The coastal terraces of the Tane-ga-shima Island and the mode of its crustal movement [in Japanese with English summ.]: Geog. Rev. Japan, v. 41, no. 10, p. 601-614, illus., 1968.

264-486 **Nakhamkin, S. A.** O novom metode razdeleniya regularnykh voln v seysmorazvedke [On a new method of separating regular waves in seismic surveying]: Prikladnaya Geofizika, no. 50, p. 23-43, illus., 1967.

269-269 **Nalivkin, V. D.; Shablinskaya, N. V.** Sootnosheniye platformennykh struktur s glubinnymi massami v zemnoy kore [Relationships of platform structures to deep masses in the Earth's crust (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 30-36, illus., tables, 1968.

Nalivkin, V. D. See *Klushin, I. G. 273-271*

270-243 **Nalivkina, E. B.** Ranneproterozoyskaya ofiolitovaya formatsiya Evropeyskoy chasti SSSR v svyazi s glubinnym stroyeniyem zemnoy kory [Early Proterozoic ophiolitic formation of the European part of the U.S.S.R. in connection with deep crustal structure (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanism i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 88, 1968.

265-467 **Namestnikov, Yu. G.; Rozanov, L. L.; Shleyfer, M. S.** Nekotoryye dannyye o svyazi moshchnostey chetvertichnykh otlozheniy i drevney struktury na territorii severa Evropeyskoy chasti SSSR [Some data on the relationship of thickness of the Quaternary formations and old structures in the territory of the northern part of the European part of the U.S.S.R.]: Akad. Nauk SSSR Doklady, v. 180, no. 2, p. 428-430, illus., 1968.

271-244 **Namestnikov, Yu. G.** Noveyshiye tektonicheskiye dvizheniya na territorii Mezenskoy vpadiny [Recent tectonic movements in the territory of the Mezensk basin], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 159-162, illus., 1968.

Namikawa, Tomikazu. See *Araki, Tohru. 269-407*

Nanasaki, Osamu. See *Kano, Hiroshi. 265-140*

Napalkov, Yu. V. See *Ryabinkin, L. A. 268-563*

273-159 **Napetvaridze, Sh. G.** Metodika model'nykh issledovaniy voprosov seysmostoykosti sooruzheniy s vosproizvedeniyem sobstvennykh kolebaniy [Procedure of model investigations of problems of earthquake resistance of structures with reproduction of the natural oscillations], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 81-88, 1968.

Napoleone, G. See *Imbo, Giuseppe. 270-450*

Naqvi, I. H. See *Leaman, D. E. 266-341*

Naqvi, S. M. See *Qureshy, M. N. 266-338*

265-353 **Narain, Hari; Kaila, K. L.; Verma, R. K.** Continental margins of India, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1051-1065, illus., 1968.

Narain, Hari. See *Verma, R. K. 268-294*

Narain, Hari. See *Verma, R. K. 268-392*

Narain, Hari. See *Kaila, K. L. 269-185*

Narain, Hari. See *Gupta, Harsh. 275-090*

Narain, Kedar. See *Nath, Mukti. 272-111*

271-068 **Narayan, Hari; Gupta, Harsh.** Observations on Koyna earthquake: Indian Geophys. Union Jour., v. 5, no. 1, p. 30-34, illus., 1968.

266-209 **Narayan, P. V. Sanker; Ramanujachary, K. R.** Reply by authors to discussion by Dr. George V. Keller [of "An inverse slope method of determining absolute resistivity", 1968]: Geophysics, v. 33, no. 5, p. 845-847, illus., 1968.

275-391 **Narembayev, T.** K metodike seysmorazvedochnykh rabot na Yuzhnoy Embe [On the procedure of seismic surveying operations on the South Emba]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 6, p. 78-81, illus., table, 1968.

266-281 **Nason, Robert D.** San Andreas fault at Cape Mendocino, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 231-240, illus.; discussion, p. 240-241, 1968.

Nasu, Noriyuki. See *Sato, Takahiro. 264-546*

Natadze, A. L. See *Ivanov, V. G. 265-472*

272-111 **Nath, Mukti; Narain, Kedar; Srivastava, J. P.** The Delhi earthquake of 27th August 1960: India Geol. Survey Recs., v. 95, pt. 2, p. 367-382, illus., tables, 1968.

Nathan, Alan. See *Greenwood, J. Arthur. 273-169*

Nathan, Alan. See *Greenwood, J. Arthur. 273-170*

274-377 **National Geophysical Research Inst.** Development of multipurpose airborne geophysical surveying facilities at the N.G.R.I., Hyderabad: [India] Natl. Geophys. Research Inst. Bull., v. 5, no. 3, p. 93-101, illus., 1967.

270-060 **National Research Council.** (Div. Earth Sci., Comm. Alaska Earthquake). The great Alaska earthquake of 1964—Hydrology, Pts. A and B: Natl. Acad. Sci. Pub. 1603, pt. A, 441 p., illus., tables; pt. B, 7 charts, 1968.

273-131 **National Science Foundation; Japan Soc. Promotion Science.** Research related to earthquake prediction problems—United States-Japan Conference, Tokyo and Kyoto, 1964, Proc.: Tokyo, Kokusai Bunken Insatsusha, 105 p. [1964,].

Natl. Acad. Eng. Comm. Ocean Eng. See *Natl. Acad. Sci. Comm. Oceanography. 275-411*

275-411 **Natl. Acad. Sci. Comm. Oceanography; Natl. Acad. Eng. Comm. Ocean Eng.** An oceanic quest—The International Decade of Ocean Exploration: Natl. Acad. Sci. Pub. 1709, 115 p., illus., tables, 1969.

270-437 **Natl. Committee for IIOE; Sci. Council Japan.** General report of the participation of Japan in the International Indian Ocean Expedition: Recs. Oceanog. Works Japan, v. 8, no. 2, 133 p., illus., tables, 1966.

271-149 **Natl.Adv. Comm.Research Geol.Sci.** Eighteenth annual report, 1967-1968—Annual review and reports of subcommittees: Canada Geol. Survey Paper 68-73, 99 p., 1969.

272-057 **Nature.** Tektites—lunar or terrestrial,: Nature, v. 222, no. 5193, p. 523, 1969.

265-459 **Naudy, Henri; Dreyer, Henri.** Essai de filtrage non-linéaire appliqué aux profils aeromagnétiques [Attempt to apply nonlinear filtering to aeromagnetic profiles (with English and German summ.)]: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 171-178, illus., 1968.

Naughton, J. J. See *Noble, C. S. 266-001*

Naughton, John J. See *Finlayson, J. Bruce. 268-614*

Naugler, Frederic P. See *Grim, Paul J. 269-673*

266-350 **Naugol'nikov, V. B.** Vychisleniye vtorykh proizvodnykh gravitatsionnogo potentsiala ot trekhmernykh tel proizvol'noy formy [Calculation of the second derivatives of the gravity potential from three-dimensional bodies of arbitrary shape (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 94-100, illus., table, 1967.

Naugol'nikov, V. B. See *Yun'kov, Ya. A. 274-272*

Naumenko-Bondarenko, I. I. See *Maslov, I. A. 268-281*

Naumov, V. A. See *Kuznetsov, M. F. 274-024*

272-288 **Naydenov, B. M.; Yefimov, I. A.** O vremeni differentsiatsii pervichnogo veshchestva mantii Zemli i proiskhozhdenii eklovitov po dannym izotopnogo izotopnogo sostava svintsa [On the time of differentiation of the primary matter of the Earth's mantle and origin of eclogites according to data on the isotopic composition of lead (with English summ.)]: Geokhimiya, no. 5, p. 604-611, illus., tables, 1968.

Nazarenko, L. I. See *Popov, V. K. 264-568*

Nazarkina, G. B. See *Vinogradov, A. P. 268-101*

265-657 **Nazarnyy, S. A.** O postroyenii seysmicheskoy apparatury dlya razvedki malykh glubin [On the building of seismic apparatus for surveying shallow depths]: Geofiz. Apparatura, no. 27, p. 59-68, illus., 1966.

Nazarov, A. G. See *Amasyan, R. O. 268-147*

273-158 **Nazarov, A. G.** Perspektivy razvitiya metodov issledovaniya na modelyakh dlya resheniya zadach inzhenernoy seysmologii [Prospects of development of methods of investigation on models for the solution of problems of engineering seismology], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 78-80, 1968.

Nazarov, P. G. See *Kuliyev, A. K. 268-589*

265-343 **Nazarov, S. N.** Geotermicheskiye osobennosti Ferganskogo neftegazonosnogo basseyna [Geothermal features of the Fergana oil and gas basin]: Geologiya Nefti i Gaza, no. 8, p. 38-42, illus., table, 1968.

Nazaryan, R. A. See *Atsagortsyan, Z. A. 268-602*

274-492 **Neal, Marvin R.** Recommended logging programs for the Illinois basin, *in* Geology and petroleum production of the Illinois basin, a symposium—Illinois and Indiana-Kentucky Geol. Socs.: Mt. Vernon, Ill., Illinois Oil and Gas Assoc., p. 265-271, illus., table, 1968.

Neave, K. G. See *Clee, T. E. 270-201*

Nebergall, Dean. See *Moe, Kenneth. 270-258*

Nechayev, V. A. See *Leonov, N. N. 265-171*

Nechayev, V. A. See *Tyapkin, K. F. 269-274*

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Nedostup, G. A. See *Arm, Ye. M. 264-582*

Nedostup, G. A. See *Bragin, A. A. 266-573*

274-276 **Negi, Janardan; Singh, Rishi Narain.** A matrix method for heat conduction in multi-layered media: Pure and Appl. Geophysics, v. 73, p. 143-151, illus., 1969.

265-336 **Negi, Janardan G.; Singh, Rishi Narain.** Propagator matrices for some geothermal problems: Pure and Appl. Geophysics, v. 69, p. 100-109, 1968.

265-337 **Negi, Janardan G.; Singh, Rishi Narain.** Heat transfer in multi-layered media with temperature dependent sources: Pure and Appl. Geophysics, v. 69, p. 110-118, 1968.

266-187 **Negi, Janardan G.; Upadhyay, S. K.** Effect of anisotropy and inhomogeneity on Love wave dispersion: Pure and Appl. Geophysics, v. 70, no. 2, p. 28-38, illus., 1968.

266-362 **Negi, Janardan G.; Singh, Rishi Narain.** Propagator matrix formulation of heat transfer in spherically stratified media: Pure and Appl. Geophysics, v. 70, no. 2, p. 74-80, table, 1968.

271-125 **Negi, Janardan G.; Gupta, Chandra P.** Models in applied geoelectromagnetics: Earth-Sci. Rev., v. 4, no. 3, p. 219-241, illus., 1968.

275-145 **Negi, Janardan G.; Raval, Upendra.** Influence of shape deformation on the electromagnetic response of conducting bodies: Jour. Geomagnetism and Geoelectricity, v. 21, no. 1, p. 399-408, illus., table, 1969.

275-221 **Negi, Janardan G.; Garde, Subhash C.** Symmetric matrix method for rapid gravity interpretation: Jour. Geophys. Research, v. 74, no. 15, p. 3804-3807, illus., 1969.

264-585 **Nelepchenko, O. M.** Modernizatsiya radiometra DRST-1 [Modernization of the DRST-1 radiometer]: Geofiz. Apparatura, no. 33, p. 164-169, illus., 1967.

Nelson, D. J. See *Drummond, J. E. 270-255*

Nemesi, Laszlo. See *Erkel, Andras. 266-216*

266-563 **Nemoto, Tadahiro.** Volcanic activity of the Kurile Islands after 1945 [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 12, no. 3, p. 107-118, illus., tables, 1967.

Nemtsov, L. D. See *Vlasenkov, V. M. 270-221*

269-707 **Nemykin, A. K.** Vliyaniye poverkhnostnoy provodimosti na elektricheskoye soprotivleniye porod [Effect of surface conductivity on the electrical resistivity of rocks]: Razved. Geofizika, no. 26, p. 101-109, illus., 1968.

274-025 **Nenashev, N. I.; Zaytsev, A. I.; Shilin, A. I.** O vozraste magmatizma Zapadnogo Verkhoyan'ya v svete radiologicheskikh dannykh [On the age of the magmatism of the Western Verkhoyansk in the light of radiological data]: Akad. Nauk SSSR Izv. Ser. Geol., no. 5, p. 23-28, illus., table, 1969.

Nepesov, K. See *Gokhberg, M. B. 271-133*

Nepesov, R. D. See *Golinskiy, G. L. 264-132*

Nepesov, R. D. See *Lykov, V. I. 264-149*

Nepesov, R. D. See *Mashrykov, K. K. 264-150*

264-151 **Nepesov, R. D.; Golinskiy, G. L.** Manyshskoye zemletryaseniye 18 iyulya 1961 goda [The Manysh earthquake of July 18, 1961]: Akad. Nauk Turkmen. SSR Izv. Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 6, p. 57-64, illus., 1967.

Nepesov, R. D. See *Golinskiy, G. L. 265-168*

Neprochnov, Yu. P. See *Muratov, M. V. 264-228*

265-351 **Neprochnov, Yu. P.** Structure of the Earth's crust of epi-continental seas—Caspian, Black, and Mediterranean, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1037-1043, illus., 1968.

Nersesov, I. L. See *Antonova, L. V. 267-130*

271-095 **Nersesov, I. L.; Pisarenko, V. F.; Rautian, T. G.; Smirnova, N. A.; Khalturin, V. I.** Primeneniye metodov teorii uznavaniya dlya statisticheskogo razdeleniya melkikh i glubokikh zemletryaseniy po dinamicheskim kharakteristikam zapisi [Use of the methods of recognition theory for statistical separation of shallow and deep earthquakes according to the dynamic characteristics of the record], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 63-74, illus., tables, 1968.

Nesbitt, R. W. See *Compston, W. 264-034*

Nesmelova, Z. N. See *Dubrova, N. V. 272-295*

271-237 **Nesmeyanov, S. A.** Neotektonicheskoye rayonirovaniye Zapadnoy Fergany [Neotectonic zoning of the Western Fergana], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 109-117, illus., 1968.

Ness, N. F. See *Taylor, Harold E. 267-381*

Ness, N. F. See *Ogilvie, K. W. 275-302*

266-422 **Ness, Norman F.** Reply [to discussion of paper by N. F. Ness, K. G. Behannon, C. S. Scearce, and S. K. Cantaro, "Early results from the magnetic field experiment on Lunar Explorer 35" (1967)]: Jour. Geophys. Research, v. 73, no. 19, p. 6390-6391, 1968.

Ness, Norman F. See *VanAllen, J. A. 268-375*

272-310 **Ness, Norman F.** The geomagnetic tail, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 97-127, illus., 1969.

68-186 **Neysnov, Yu. V.** O fazovykh izmereniyakh v metode radiovolnovogo prosvechivaniya [On phase measurements in the method of radiowave penetration]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 10, p. 114-119, illus., 1968.

264-207 **Nettleton, L. L.** The economic motivation—Geology and geophysics for oil and mineral exploration, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 261-268, illus., 1967.

275-224 **Nettleton, L. L.; LaFehr, T. R.** Reply by authors to discussion [of 1967 paper] by Lloyd S. Grearson [1969]: Geophysics, v. 34, no. 3, p. 479-480, 1969.

274-450 **Neuber, Hans.** Beitrage zur statistischen Mechanik der Locker- und Festgesteine [Contribution to statistical mechanics of unconsolidated and consolidated rocks (with English and French abs.)], *in* Beitrage zur Ingenieurgeologie—A symposium: Fortschr. Geologie Rheinland u. Westfalen, v. 15, p. 181-244, illus., tables, 1968.

274-266 **Neumann, F. J. G.** Blair Athol coalfield gravity survey, Queensland 1959: Australia Bur. Mineral Resources, Geology and Geophysics Rept., no. 94, 13 p., illus., tables, 1965.

Neumann, Gerhard. See *Greenwood, J. Arthur. 273-169*

Neumann, Gerhard. See *Greenwood, J. Arthur. 273-170*

272-370 **Neumann, W.** Versuch einer thermomagnetischen Analyse zur Gesteinsklassifikation—Teil 1, Einfache thermomagnetische Kurven [Attempt at a thermomagnetic analysis for the classification of rocks—Pt. 1, Simple thermomagnetic curves]: Geophysik u. Geologie, no. 12, p. 46-55, illus., table, 1968.

269-271 **Nevolin, N. V.; Bogdanova, S. V.; Lapinskaya, T. A.; Podoba, N. V.; Rtishcheva, V. F.; Serova, A. D.** Osnovnyye cherty stroyeniya fundamenta Vostochno-

Evropeyskoy platformy [Main features of the structure of the basement of the East-European platform (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 88-91, illus., 1968.

270-102 **Newell, H. E.** Current program and considerations of the future for Earth resources survey, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 69-75, 1968.

Newkirk, G. A. See *Norton, R. H. 268-087*

267-605 **Newman, Walter S.; Munsart, Craig A.** Holocene geology of the Wachapreague lagoon, eastern shore peninsula, Virginia: Marine Geology, v. 6, no. 2, p. 81-105, illus., 1968.

Newman, Walter S. See *Fairbridge, Rhodes W. 268-238*

275-406 **Newton, John G.; Pilkey, Orrin H.** Topography of the continental margin off the Carolinas: Southeastern Geology, v. 10, no. 2, p. 87-92, illus., 1969.

264-296 **Newton, Robert C.** The status and future of high static-pressure geophysical research, *in* Advances in high pressure research, V. 1 (R. S. Bradley, editor): London and New York, Academic Press, p. 195-263, illus., table, 1966.

Ney, E. P. See *Allen, D. A. 272-073*

270-367 **Neyman, B.; Zuberek, W.** Seismo-akustische Forschungen in Anwendung zum Gebirgsschlagsproblem [Seismoacoustic investigations in application to the problem of rock bursts]: Freiberger Forschungshefte, C 225, p. 49-51, illus., 1967.

268-107 **Neyman, V. B.** A comparative description of hypsographic data of some planets, *in* The Earth and the Universe: Springfield, Va., Clearinghouse for Federal Sci. and Tech. Inf., p. 264-270, illus., table, 1968; translated from Russian, *in* Zemlya vo vselennoy: Moscow, Izdatel'stvo "MYSL," 1964.

269-158 **Neyman, V. B.** Nekotoryye novyye dannyye o morfologii lunnoy poverkhnosti [Some new data on the morphology of the lunar surface (with English summ.)]: Astron. Zhur., v. 44, no. 4, p. 831-834, illus., 1967.

Neymark, G. S. See *Gerling, V. E. 265-602*

Nezolenova, E. A. See *Khalevin, N. I,. 267-133*

268-351 **Nezolenova, E. A.; Khalevin, N. I.** O kharaktere razdela Mokhorovichicha na Urale [On the nature of the Mohorovicic discontinuity in the Urals], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 17-20, illus., 1967.

Nezolenova, E. A. See *Khalevin, N. I. 268-352*

Nezolenova, E. A. See *Khalevin, N. I. 268-353*

Nezolenova, E. A. See *Khalevin, N. I. 270-383*

266-385 **Niazi, Mansour.** Crustal thickness in the central Saudi Arabian Peninsula: Royal Astron. Soc. Geophys. Jour., v. 15, no. 5, p. 545-547, illus., table, 1968.

269-196 **Niazi, Mansour.** Fault rupture in the Iranian (Dasht-e-bayaz) earthquake of August 1968: Nature, v. 220, no. 5167, p. 569-570, illus., table, 1968.

Nichiporuk, V. A. See *Kamenev, S. P. 264-573*

265-076 **Nichiporuk, Walter.** Former location of the Admire and Springwater pallasites: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 433-435, tables, 1968.

271-138 **Nichoga, V. A.** Metodika eksperimental'nogo issledovaniya nizkochastotnykh induktsionnykh mangitopriyemnikov dlya elektrorazvedochnoy apparatury [Procedure of experimental investigation of low-frequency magnetic induction pickups for electrical exploration apparatus]: Geofiz. Apparatura, no. 31, p. 83-92, illus., table, 1967.

271-139 **Nichoga, V. A.** Ustroystvo dlya izmereniya sobstvennoy yemkosti katushek induktivnosti [Device for measuring the natural capacitance of induction coils]: Geofiz. Apparatura, no. 31, p. 154-158, illus., 1967.

Nichoga, V. A. See *Mizyuk, L. Ya. 274-204*

272-030 **Nichols, Harvey.** The post-glacial history of vegetation and climate at Ennadai Lake, Keewatin, and Lynn Lake, Manitoba (Canada): Eiszeitalter u. Gegenwart, v. 18, p. 176-197, illus., table, 1967.

268-009 **Nichols, Robert L.** Coastal geomorphology, McMurdo Sound, Antarctica [with French and German abs.]: Jour. Glaciology, v. 7, no. 51, p. 449-478, illus., table, 1968.

267-597 **Nichols, Thomas C., Jr.; Abel, John F., Jr.; Lee, Fitzhugh T.** A solid-inclusion borehole probe to determine three-dimensional stress changes at a point in a rock mass: U.S. Geol. Survey Bull. 1258-C, p. C1-C28, illus., 1968.

Nicolaysen, L. O. See *Alsopp, H. L. 272-257*

Nicolaysen, L. O. See *Allsopp, H. L. 275-009*

275-021 **Nicoletti, M.** Datazioni argon potassio di alcune vulcaniti delle Regioni vulcaniche Cimina e Vicana [Potassium-argon dating of some volcanics of the volcanic regions of Cimino and Vico (with English abs.)]: Period. Mineralogia, v. 38, no. 1, p. 1-20, table, 1969.

268-412 **Nicolich, Rinaldo; Mosetti, Ferruccio; Macchi, Giuseppe.** Sul significato della suscettivita magnetica dei sedimenti di fondo marino [On the significance of the magnetic susceptibility of sediments on the sea bottom (with English abs.)]: Veneto Ist. Sci., Lettere ed Arti Atti, 1966-67, v. 125, p. 227-243, illus., tables, 1967.

Nief, G. See *Lorius, C. 264-308*

265-371 **Nielsen, H.** Sulfur isotopes in the Rhinegraben evaporite sulfates, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 27-29, illus., 1967:

Nielsen, H. See *Hoefs, J. 274-295*

268-358 **Nielsen, Heimo.** Schwefel-Isotopenverhaltnisse des St. Andreasberg und anderen Erzvorkommen des Harzes [Sulfur isotope ratios of the St. Andreasberg and other ore occurrences of the Harz (with English abs.)]: Neues Jahrb. Mineralogie Abh., v. 109, no. 3, p. 289-321, illus., tables, 1968.

269-063 **Nielsen, J. M.; Perkins, R. W.** Anticoincidence shielded multidimensional gamma-ray spectrometers for low-level counting, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 687-701, illus., tables, 1967.

267-243 **Nielson, Lawrence E.** Some hypotheses on surging glaciers: Geol. Soc. America Bull., v. 79, no. 9, p. 1195-1201, illus., 1968.

274-096 **Nigam, Navin C.; Jennings, Paul C.** Calculations of response spectra from strong-motion earthquake records: Seismol. Soc. America Bull., v. 59, no. 2, p. 909-922, illus., tables, 1969.

Niggli, E. See *Jager, E. 269-052*

268-239 **Niini, Aarno.** The movement of the continent of America—Facts and assumptions: Acad. Sci. Fennicae Annales, ser. A-3, no. 95, 21 p., illus., 1968.

Niitsuma, Nobuaki. See *Nakagawa, Hisao. 275-332*

Nikitin, L. V. See *Kostrov, B. V. 265-205*

Nikitin, L. V. See *Kostrov, B. V. 267-148*

264-231 **Nikitina, N. D.** Svyaz' vulkanizma s formirovaniyem neotektonicheskikh struktur (na primere Gavayskikh ostrovov [The relationship of volcanism to the formation of neotectonic structures (illustrated by the Hawaiian Islands)]: Zhizn' Zemli, no. 4, p. 32-38, illus., 1967.

Nikitina, N. V. See *Matveyev, V. G. 268-568*

271-141 **Nikitina, V. N.; Enenshteyn, B. S.** Opredeleniye elektricheskikh svoystv porod kristallicheskogo fundamenta v yestestvennom zaleganii [Determination of the electrical properties of the rocks of the crystalline basement in place]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 49-61, illus., 1968.

Nikitina, Ye. I. See *Vasilenko, V. B. 273-314*

266-252 **Nikoladze, I. Ye.** O razdelenii potentsial'nykh poley na lokal'nyye i regional'nyye sostavlyayushchiye [On the separation of potential fields into local and regional components]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 124-132, table, 1966.

265-202 **Nikolayev, A. V.** Vozmozhnosti issledovaniya sred so sluchaynym raspredeleniyem neodnorodnostey v prisutstvii mikroseysm [Possibilities of investigating mediums with random distribution of inhomogeneities in the presence of microseisms]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 26-38, illus., 1968.

Nikolayev, A. V. See *Galkin, I. N. 266-394*

270-409 **Nikolayev, A. V.; Maksimov, A. B.** Poluavtomat dlya otsifrovki seysmogramm [Semiautomatic device for reading off seismograms (with English summ.)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 109-113, illus., 1968.

268-559 **Nikolayev, I. V.** Korrelyatsionyy metod obrabotki zapisey obmennykh prokhodyashchikh voln [A correlational method of processing records of converted traveling waves]: Prikladnaya Geofizika, no. 53, p. 62-70, illus., table, 1968.

271-225 **Nikolayev, N. I.** Noveyshaya tektonika Chernogo morya i voprosy yego razvitiya [Recent tectonics of the Black Sea and problems of its evolution], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 16-25, illus., 1968.

271-233 **Nikolayev, P. N.** Vliyaniye istorii tektonicheskogo razvitiya na seysmicheskuyu aktivnost' (na primere Ferganskoy vpadiny) [Effect of the history of tectonic evolution on seismic activity (illustrated by the Fergana basin)], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 78-93, illus., 1968.

274-027 **Nikolayeva, I. V.; Klyarovskiy, V. M.; Grigor'yeva, T. N.; Vorodayevskaya, Z. V.** Vliyaniye epigeneticheskikh protsessov na strukturno-khimicheskiye svoystva i absolyutnyy vozrast glaukonita [Effect of epigenetic processes on the structural-chemical properties and absolute age of glauconite]: Akad. Nauk SSSR Doklady, v. 185 no. 2, p. 419-422, illus., table, 1969.

Nikolayeva, Ye. Ya. See *Velikov, E. Kh. 265-247*

Nikolayeva, Ye. Ya. See *Vartanov, S. P. 269-639*

Nikolayeva, Ye. Ya. See *Kogan, L. I. 271-526*

266-401 **Nikolayevskiy, A. A.** Glubinnoye stroyeniye Okhotsko-Chukotskogo vulkanogennogo poyasa [Deep structure of the Okhotsk-Chukot vulcanogenic belt], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 137-148, illus., 1967.

Nikolenko, K. K. See *Aleksandrov, B. L. 265-649*

264-359 **Nikol'skiy, A. P.** Allowed intervals within 24-hour periods with an increased probability of the appearance of the active periods of magnetic storms: Geomagnetism and Aeronomy, v. 7, no. 6, p. 844-850, illus., table, 1967.

Nikol'skiy, V. M. See *Tarasenko, T. V. 275-174*

Nikonov, A. A. See *Gzovskiy, M. V. 267-230*

Nikonov, A. I. See *Alekseyev, V. V. 270-174*

Nikonov, B. L. See *Shaub, Yu. B. 270-141*

Nikonova, N. A. See *Bikkenina, S. K. 268-313*

Nimnim, M. E. See *Sabry Youssef, M. 270-126*

264-387 **Ninkovich, Dragoslav.** Pleistocene volcanic eruptions in New Zealand recorded in deep-sea sediments: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 89-102, illus., tables, 1968.

265-379 **Nishida, Atsuhiro.** Coherence of geomagnetic DP 2 fluctuations with interplanetary magnetic variations: Jour. Geophys. Research, v. 73, no. 17, p. 5549-5559, illus., table, 1968.

Nishida, Junichi. See *Sasajima, Sadao. 268-394*

Nishida, Junichi. See *Sasajima, Sadao. 270-275*

Nishikawa, Masana. See *Takeuchi, Hitoshi. 272-063*

275-112 **Nishimura, Kasuke; Segawa, Shuryo; Mizuno, Hiroshi; Hotta, Hosei; Miura, Osamu; Tamura, Toshikazu; Akagiri, Takekazu.** Geomorphological accidents caused by the Tokachi-oki earthquake: Tohoku Univ. Sci. Repts., ser. 7 (Geography), v. 18, no. 1, p. 41-65, illus., table, 1969.

Nishimura, T. See *Hayakawa, S. 268-056*

265-200 **Nishitake, Teruo; Miyoshi, Yukio.** Elastic wave velocities in anisotropic sedimentary rocks: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 17, pt. 3, p. 1-6, illus., tables, 1968.

275-374 **Niz'yev, V. A.** Novyye dannyye o glubinnom stroyenii i neftegazonosnosti shel'fa vostochnoy chasti Yuzhnogo Kaspiya [New data on the deep structure and oil and gas possibilities of the shelf of the eastern part of the South Caspian]: Geologiya Nefti i Gaza, no. 4, p. 15-19, illus., tables, 1969.

NKomo, I. T. See *Stacey, J. S. 271-325*

265-017 **Noakes, John E.; Kim, S. M.; Fischer, F.** Oak Ridge Associated Universities radiocarbon dates II: Radiocarbon, v. 10, no. 2, p. 346-349, 1968.

266-001 **Noble, C. S.; Naughton, J. J.** Deep-ocean basalts—Inert gas content and uncertainties in age dating: Science, v. 162, no. 3850, p. 265-267, table, 1968.

264-392 **Noble, Donald C.; Bath, Gordon D.; Christiansen, Robert L.; Orkild, Paul P** Zonal relations and paleomagnetism of the Spearhead and Rocket Wash Members o the Thirsty Canyon Tuff, southern Nevada: U.S. Geol. Survey Prof. Paper 600-C, p C61-C65, illus., tables, 1968.

Noble, Donald C. See *Armstrong, Richard L. 272-007*

265-427 **Nodia, M. Z.; Katsiashvili, N. A.; Khvedelidze, N. S.** Tsiklicheskiye fluktuatsi vekovykh variatsiy geomagnitnogo polya [Cyclic fluctuations of the secular variations of the geomagnetic field]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 26 no. 1, p. 5-27, illus., tables, 1966.

267-428 **Nodia, M. Z.; Katsiashvili, N. A.; Khvedelidze, N. S.** Fluctuations of the secula variation of the geomagnetic field and their possible relation to earthquak phenomena: Geomagnetism and Aeronomy, v. 8, no. 2, p. 310-312, illus., table 1968.

Nogoshi, Mitsuo. See *Hashizume, Michio. 272-269*

274-463 **Noll, Horst.** Maare und marr-ahnliche Explosionskrater in Island—Ein Vergleic mit den Maar-Vulkanismus der Eifel [Maar and maar-like explosion craters in Iceland—A comparison with the maar-vulcanism of the Eifel (with English summ.)] Koln Univ. Geol. Inst. Sonderveroffentl. 11, 115 p., illus., table, 1967.

265-608 **Nomokonov, V. P.; Ganguli, D. K.** Theory of seismic prospecting instrument (second edition, revised): New York and London, Gordon and Breach, Scienc Publishers, 142 p., illus., 1967; originally published 1960.

271-518 **Nomokonov, V. P.** Plane wave front method: Indian Geophys. Union Jour., v. 4 nos. 3-4, p. 169-179, illus., 1967.

271-318 **Noponen, Ilkka.** Use of particle motion in detecting and identifying crusta phases from near events: Jour. Physics Earth, v. 16, no. 2, p. 79-85, illus., table 1968.

Nordemann, D. See *Tobailem, J. 269-099*

Norinelli, A. See *Benvenuti, G. 267-163*

Norinelli, A. See *Contini, G. Finzi. 267-164*

267-256 **Norinelli, A.; Finzi-Contini, G.** Un simulatore fotoelettrico per l'interpretazion gravimetrica di strutture bi- e tridimensional [A photoelectric simulator for th gravimetric interpretation of bi- and tri-dimensional structures (with English abs.) Boll. Geofisica Teor. ed Appl., v. 10, no. 37, p. 66-87, illus., 1968.

Norinelli, A. See *Benvenuti, G. 273-179*

265-180 **Norinelli, Armando.** Un nuovo strumeto per la misura della marea gravimetri [A new instrument for measuring the gravity tide]: Accad. Patavina di Sci., Lett. e Artes, Cl. Sci., Mat. e Nat. Mem., v. 76, p. 21-39, 1964-65 (reprinted as Univ. Ba Ist. Geodesia i Geografia pubbl. no. 46).

274-132 **Norman, A. Yu.** Seysmicheskiye nablyudeniya na stantsii Novolazarevskoy v vremya raboty Devyatoy sovetskoy antarkticheskoy ekspeditsii [Seismic observ tions at the Novolazarevskaya station at the time of the work of the Ninth Soviet A tarctic Expedition]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 55, p. 42-4 1965.

Norman, Carl. See *Overton, Harold L. 274-479*

267-572 **Normark, William R.; Shor, George G., Jr.** Seismic reflection study of the sha low structure of the Hawaiian arch: Jour. Geophys. Research, v. 73, no. 22, p. 699 6998, illus., 1968.

267-575 **Normark, William R.; Curray, Joseph R.** Geology and structure of the tip of Baja California, Mexico: Geol. Soc. America Bull., v. 79, no. 11, p. 1589-1600, illus., table, 1968.

Norris, D. K. See *Baer, A. J. 273-239*

273-246 **Norris, D. K.; Barron, K.** Structural analysis of features on natural and artificial faults, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 136-167, illus.; discussion, p. 167-174, 1969.

Norris, Roger A. See *Johnson, Rockne H. 268-112*

269-685 **Norris, Roger A.; Johnson, Rockne H.** Submarine volcanic eruptions recently located in the Pacific by Sofar hydrophones: Jour. Geophys. Research, v. 74, no. 2, p. 650-664, illus., tables, 1969.

272-525 **Norris, Stanley E.; Fidler, Richard E.** Correlation of carbonate rock units in northwest Ohio by natural gamma logging, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B158-B161, illus., 1969.

264-090 **Northrop, J.; Menard, H. W.; Duennebier, F. K.** Seismic and bathymetric evidence of a fracture zone on Gorda Ridge: Science, v. 161, no. 3842, p. 688-690, illus., 1968.

268-087 **Norton, R. H.; Gunn, J. E.; Livingston, W. C.; Newkirk, G. A.; Zirin, H.** Astronomy, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 337-340, illus., 1968.

266-342 **Nosovskiy, M. F.; Gil'kman, A. I.** Submeridional'nyye glubinnyye razlomy i osnovnoye strukturno-fatsial'noye rayonirovaniye Severnogo Prichernomor'ya [Submeridional deep fractures and the fundamental structural-facies zoning of the northern Black Sea region]: Akad. Nauk SSSR Doklady, v. 181, no. 4, p. 946-949, illus., 1968.

269-442 **Nougier, Jacques; Plessard, Claude.** Sur une inversion du champ magnetique terrestre aux îles Kerguelen au cours du Miocene [On an inversion of the terrestrial magnetic field in the Kerguelen Islands during the Miocene]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 22, p. 1249-1252, table, 1968.

Novik, G. Ya. See *Rzhevskiy, V. V. 268-592*

270-523 **Novikov, G. F.; Sinitsyn, A. Ya.** Opyt ispol'zovaniya analizatora LSU-5K dlya opredeleniya U(Ra), Th, K v skvazhinakh [Attempt to use the LSU-5K analyzer to determine U(Ra), Th, and K in boreholes]: Geofiz. Apparatura, no. 35, p. 158-164, illus., table, 1968.

270-292 **Novikov, L. N.** Oriyentatsionnyy sdvig chastoty v kvantovykh radioopticheskikh magnitometrakh [Orientational frequency shift of radio-optical quantum magnetometers]: Geofiz. Apparatura, no. 36, p. 61-66, 1968.

269-160 **Novikov, V. V.** O stratovulkanakh v mezorel'yefe Luny [On stratovolcanoes in the mesorelief of the Moon (with English summ.)]: Astron. Zhur., v. 45, no. 5, p. 1124-1127, illus., table, 1968.

267-210 **Novokshanova-Sokolovskaya, Z. K.** Kartograficheskiye i geodezicheskiye raboty v Rossi v XIX-nachale XX v. [Cartographic and geodetic work in Russia in the 19th and beginning of the 20th centuries]: Moscow, Izdatel'stvo "Nauka," 265 p., illus., 1967.

Novysh, V. V. See *Ivanov, M. M. 268-444*

Novysh, V. V. See *Abramova, L. M. 271-356*

Novysh, V. V. See *Abramov, Yu. M. 273-371*

Nowatski, Edward A. See *Egan, Walter G. 266-078*

Nowatzki, Edward A. See *Egan, Walter G. 272-078*

269-213 **Nowroozi, A. A.; Kuo, J.; Ewing, Maurice.** Solid earth and oceanic tides recorded on the ocean floor off the coast of Northern California: Jour. Geophys. Research, v. 74, no. 2, p. 605-614, illus., tables, 1969.

267-031 **Nozawa, Tamotsu.** Isotopic ages of Hida metamorphic belt—Summary and note in 1968 [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 74, no. 8, p. 447-450, illus., table, 1968.

267-032 **Nozawa, Tamotsu.** Radiometric ages of granitic rocks in Outer Zone of Southwest Japan and its extension—1968 summary and north-shift hypothesis of igneous activity: Geol. Soc. Japan Jour., v. 74, no. 9, p. 485-489, illus., table, 1968.

Nozawa, Tamotsu. See *Shibata, Ken. 269-075*

Nozawa, Tamotsu. See *Shibata, Ken. 269-076*

Nozawa, Tamotsu. See *Shibata, Ken. 269-077*

Nozawa, Tamotsu. See *Shibata, Ken. 269-078*

Nozawa, Tamotsu. See *Shibata, Ken. 269-079*

Nozawa, Tamotsu. See *Shibata, Ken. 269-080*

Nozawa, Tamotsu. See *Shibata, Ken. 271-032*

266-472 **Nozharov, P. B.** Notes on the origin of remanent magnetization of sediments formed in a restless water basin: Bolgar. Akad. Nauk Doklady, v. 21, no. 6, p. 529-531, 1968.

266-473 **Nozharov, P. B.** On the theory of post depositional remanent magnetization of sedimentary rocks: Bolgar. Akad. Nauk Doklady, v. 21, no. 7, p. 653-655, 1968.

266-466 **Nozharov, Peter B.** Comments on the influence of fluid motion upon the magnetic orientation of sediments: Pure and Appl. Geophysics, v. 70, no. 2, p. 81-87, tables, 1968.

268-180 **Nunes de Sousa, Manuel.** Aplicação do método de resistividade eléctrica na localização de furos de sonda para obténcão de aguas subterrâneas nas rocha cristalias do Distrito de Moçamedes (Angola) [Application of the electrical resistivity method to locating boreholes for obtaining ground water in crystalline rock in the District of Moçâmedes (Angola) (with French and English abs.)]: Angol Serviços Geologia e Minas Bol. 14, 1966, p. 41-48, illus., 1968.

268-181 **Nunes de Sousa, Manuel.** Contribuição dos métodos geofísicos para a localizaçã de mineralização de cobre na região de Serpa Pinto (Angola) [Contribution o geophysical methods to locating of copper mineralization in the Serpa Pinto regio (Angola) (with French and English abs.)]: Angola Serviços Geologia e Minas Bo 15, 1967, p. 5-12, illus., 1968.

Nur, Amos. See *Simmons, Gene. 267-143*

Nur, Amos. See *Simmons, Gene. 274-167*

Nurgaliyev, B. See *Al'mukhanbetov, D. 271-140*

275-376 **Nurmanov, A. M.** Geologicheskoye stroyeniye vostochnoy chasti Yuzhno-Mangyshlakogo progiba [Geology of the eastern part of the South Mangyshlak depression]: Geologiya Nefti i Gaza, no. 4, p. 28-30, illus., 1969.

Nuti, S. See *Longinelli, A. 267-341*

272-139 **Nuttli, Otto W.** Travel times and amplitudes of S-waves from nuclear explosions in Nevada: Seismol. Soc. America Bull., v. 59, no. 1, p. 385-398, illus., tables, 1969.

271-572 **Nuzhnaya, E. M.; Sun, Shun-I.** Predlozheniye po usovershenstvovaniyu laboratorii akusticheskogo karotazha LAK-1 [Suggestion for improvement of the LAK-1 acoustic logging laboratory]: Geofiz. Apparatura, no. 31, p. 192-194, illus., 1967.

269-032 **Nydal, R.** On the transfer of radiocarbon in nature, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 119-128, illus., tables, 1967.

275-212 **Nye, J. F.** The effect of longitudinal stress on the shear stress at the base of an ice sheet [with French and German abs.]: Jour. Glaciology, v. 8, no. 53, p. 207-213, illus., 1969.

Oberbeck, Verne R. See *Quaide, William L. 264-060*

269-124 **Oberbeck, Verne R.; Quaide, William L.** Genetic implications of lunar regolith thickness variations: Icarus, v. 9, no. 3, p. 446-465, illus., 1968.

Oberbeck, Verne R. See *Gault, Donald E. 273-058*

265-420 **Oberc, Pavel; Raspopov, O. M.** Issledovaniye prostranstvennykh kharakteristik pul'satsiy geomagnitnogo polya tipa Pc 5 [Investigation of the spatial characteristics of Pc 5-type pulsations of the geomagnetic field]: Acta Geophys. Polonica, v. 15, no. 4, p. 305-313, illus., tables, 1967.

270-412 **Obert, Leonard.** Determination of stress in rock—A state-of-the-art report: Am. Soc. Testing and Materials Spec. Tech. Pub. 429, 56 p., illus., tables, 1967.

269-411 **Obertz, P.; Raspopov, O. M.** Study of the spatial characteristics of type Pc5 geomagnetic pulsations: Geomagnetism and Aeronomy, v. 8, no. 3, p. 424-427, illus., 1968.

Obi, Nakamura. See *Horikawa, Yoshio. 265-598*

Oblogina, T. I. See *Burmakov, Yu. A. 271-522*

275-117 **Oblogina, T. I.** Ob odnom svoystve luchey v neodnorodnoy srede [On a property of rays in an inhomogeneous medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 66-67, 1969.

267-566 **Obolenskaya, L. M.** "Burya mikroseysm" 23-26 yanvarya 1964 g. na seysmicheskoy stantsii Apatity ["Microseism storm" of January 23-26, 1964, at the Apatity seismic station], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 22-25, illus., 1968.

266-009 **Obradovich, J. D.** The potential use of glauconite forlate-Cenozoic geochronology, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 267-279, illus., tables, 1968.

Obradovich, J. D. See *Moore, W. J. 267-003*

Obradovich, J. D. See *Robinson, G. D. 271-183*

73-028 **Obradovich, J. D.; Peterman, Z. E.** Geochronology of the Belt Series, Montana, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 737-747, illus., tables, 1968.

Obradovich, John D. See *Hedge, Carl E. 264-005*

Obradovich, John D. See *Tilling, Robert I. 267-002*

O'Brien, D. P. See *Ward, S. H. 265-210*

O'Brien, Douglas P. See *Ralph, Elizabeth K. 266-489*

264-179 **Obukhov, G. G.** Pole gorizontal'nogo elektricheskogo dipolya nad malymi nerovnostyami izoliruyushchego osnovaniya [The field of a horizontal electrical dipole over small irregularities of an insulating basement]: Prikladnaya Geofizika, no. 50, p. 124-132, illus., 1967.

264-180 **Obukhov, G. G.** Pole ploskoy volny nad tonkim neodnorodnym provodyashchim sloyem, lezhashchim na ideal'no provodyashchem osnovanii [The field of a plane wave on a thin nonuniform conducting layer lying on an ideally conducting basement]: Prikladnaya Geofizika, no. 51, p. 88-92, illus., 1968.

267-170 **Obukhov, G. G.** O nekotorykh svoystvakh nestatsionarnykh elektromagnitnykh poley v zemle i ikh ispol'zovanii v elektrorazvedke [On some properties of nonstationary electromagnetic fields in the ground and their use in electrical surveying]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 62-70, 1968.

Ocheretina, V. B. See *Kuznetsov, V. L. 272-502*

Ocheretina, V. B. See *Kuznetsov, V. L. 273-470*

Ochkur, A. P. See *Alekseyev, V. V. 268-626*

Ochkur, A. P. See *Alekseyev, V. V. 269-591*

Ochkur, A. P. See *Alekseyev, F. A. 271-500*

266-379 **O'Connell, Richard J.** Critique of the paper by W. J. van de Lindt, "Movement o the Mohorovicic discontinuity under isostatic conditions" [1967]: Jour. Geophys Research, v. 73, no. 20, p. 6604-6607, illus., 1968.

264-063 **O'Connor, J. T.** Mineral stability at the Martian surface: Jour. Geophys Research, v. 73, no. 16, p. 5301-5311, illus., tables, 1968.

O'Connor, J. T. See *Bunker, C. M. 264-072*

Oda, Masanobu. See *Hara, Ikuo. 273-485*

Odaka, Toshikazu. See *Usami, Tatsuo. 271-312*

267-600 **Ode, Helmer.** Review of mechanical properties of salt relating to salt-dome genesis, *in* Diapirism and diapirs—A symposium: Am. Assoc. Petroleum Geologists Mem 8, p. 53-78, illus., tables, 1968.

Odegova, M. V. See *Golenetskiy, S. I. 270-086*

268-232 **Odintsov, M. M.; Vladimirov, V. M.; Tverdokhlebov, V. A.** Regularities of kimberlites distribution in the Earth's crust, *in* Internat. Geol. Cong., 23d, Prague, 196 Proc., Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 139-146, illus 1968.

270-231 **Oelsner, Christian; Leischner, Herbert; Pischel, Sigward.** Eine kalibervariab Sonde Für Wärmeleitfähigkeitsmessungen in situ [A variable-caliber sonde for he conductivity measurements in place]: Freiberger Forschungshefte, C 232, p. 47-6 illus., tables, 1968.

270-373 **Oelsner, Christian.** Hammerschlagseismische Untersuchungen im Hinblick a die zeitliche Veranderung der Standfestigkeit von Magazinbauen [Hammer-blo

seismic investigations in connection with the temporal variations in the sturdiness of underground ore bins]: Freiberger Forschungshefte, C 225, p. 123-131, illus., 1967.

270-379 **Oelsner, Christian.** (and others). Hammerschlagseismische Untersuchungen zur Lösung geomechanischer Aufgaben (Prinzip und Ergebnisse) [Hammer-blow seismic investigations for the solution of geomechanical problems (principle and results)]: Freiberger Forschungshefte, C 240, 86 p., illus., tables, 1968.

272-243 **Oelsner, Christian.** Diskussionsbeitrag zum Vortrag E. Hurtig [Discussion contribution to the address by E. Hurtig]: Freiberger Forschungshefte C 238, p. 119-120, illus., 1968.

Oeschger, H. See *Aegerter, S. K. 269-027*

Oeschger, H. See *Alder, B. 269-038*

Oeschger, H. See *Loosli, H. H. 269-058*

Offield, Terry W. See *Howard, Keith A. 266-070*

271-223 **Offman, P. Ye.** O svyazi tektonicheskogo razvitiya zemnoy kory s magmatizmom [On the relationship of tectonic evolution of the Earth's crust to magmatism (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 241-242, 1968.

Oganesyan, A. T. See *Tyablikov, Yu. Ye. 273-162*

273-160 **Oganesyan, N. L.; Shakhsuvaryan, L. V.** Dinamicheskiye ispytaniya modeley zdaniya na gibkikh rezino-metallicheskikh podushkakh [Dynamic tests of models of a building on flexible resin-metallic bearings], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 89-92, illus., 1968.

264-192 **Oganesyan, Sh. S.; Akopyan, Ts. G.; Asatryan, R. G.; Aslanyan, A. M.; Pogosyan, G. A.** Rezul'taty geofizicheskikh issledovaniy i napravleniye dal'neyshikh rabot na neft' i gaz v Armyanskoy SSR [Results of geophysical investigations and directions of future work on oil and gas in the Armenian S.S.R.]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 20, no. 3, p. 66-75, 1967.

275-245 **Oganizyan, Sh. S.** O prichinakh, vyzyvayushchikh otritsatel'nyye anomalii sily tyazhesti na territorii Armyanskogo SSR [On the causes producing the negative gravity anomalies in the territory of the Armenian S.S.R.]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 19, nos. 1-2, p. 132-138, 1966.

Ogarinov, I. S. See *Arkhipov, V. I. 267-278*

267-280 **Ogarinov, I. S.** Glubinnaya struktura Urala i sopredel'nykh regionov [Deep structure of the Urals and adjacent regions], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 109-116, illus., 1968.

267-281 **Ogarinov, I. S.** Sekushchiye Ural struktury i ikh rol'v razvitiy Ural'skoy geosinklinali [Structures cutting the Urals and their role in the development of the Ural geosyncline], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 117-121, illus., 1968.

265-234 **Ogawa, Itsuro; Oyama, Shiro.** Responses in time domain and frequency domain—Electromagnetic coupling [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 6, p. 255-262, illus., 1967.

271-012 **Ogden, J. Gordon, 3d; Hay, Ruth J.** Ohio Wesleyan University natural radiocarbon measurements IV: Radiocarbon, v. 11, no. 1, p. 137-149, tables, 1969.

Ogilvie, K. W. See *Burlaga, L. F. 266-419*

Ogilvie, K. W. See *Burlaga, L. F. 273-332*

275-302 **Ogilvie, K. W.; Ness, N. F.** Dependence of the lunar wake on solar wind plasm characteristics: Jour. Geophys. Research, v. 74, no. 16, p. 4123-4128, illus., 1969.

272-157 **Oguchi, Yuko; Takeuchi, Hitoshi.** Effect of transverse isotropy on the dispersio of surface waves—Pt. 1, Love waves [in Japanese with English abs.]: Zisin, ser. 2, v 21, no. 1, p. 21-31, tables, 1968.

272-158 **Oguchi, Yuko; Takeuchi, Hitoshi.** Effect of transverse isotropy on the dispersio of surface waves—Pt. 2, Rayleigh waves [in Japanese with English abs.]: Zisin, ser. 2 v. 21, no. 2, p. 89-96, tables, 1968.

Ogushi, Nagashi. See *Yamamoto, Masahiro. 275-275*

Oguti, T. See *Hayashi, K. 270-265*

269-403 **Oguti, Takasi.** Development and decay of minor polar geomagnetic disturbances Rept. Ionosphere and Space Research Japan, v. 22, nos. 1-2, p. 25-35, illus., table 1968.

269-404 **Oguti, Takasi.** Features of magnetic storms related to the solar-wind structure Rept. Ionosphere and Space Research Japan, v. 22, nos. 1-2, p. 37-44, illus., tabl 1968.

Oguti, Takasi. See *Kokubun, Susumu. 269-405*

270-267 **Oguti, Takasi.** Positive and negative correlations of geomagnetic fluctuations a conjugate-pair stations Syowa Base and Reykjavik: Rept. Ionosphere and Spac Research Japan, v. 22, no. 3, p. 197-200, illus., 1968.

267-319 **O'Hara, M. J.** Are ocean floor basalts primary magma,: Nature, v. 220, no. 516 p. 683-686, illus., 1968.

264-405 **Ohnaka, Mitiyasu; Kinoshita, Hajimu.** Effects of uniaxial compression o remanent magnetization: Jour. Geomagnetism and Geoelectricity, v. 20, no. 2, p. 9 99, illus., 1968.

Ohnaka, Mitiyasu. See *Kinoshita, Majimu. 266-124*

266-125 **Ohnaka, Mitiyasu; Kinoshita, Hajimu.** Effect of compressional stress on the ma netization of volcanic rocks—Application to earthquake prediction, [Pt.] 2 [Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 1, p. 12-2 illus., tables, 1968.

Ohnaka, N. See *Ozima, M. 264-404*

Ohnaka, Y. See *Ozima, M. 264-406*

264-124 **Ohsaki, Yorihiko.** Building damage and soil condition, *in* General report on t Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Elect cal Engineering College Press, p. 355-383, illus., 1968.

Ohta, Yutaka. See *Kubotera, Akira. 265-199*

Ohta, Yutaka. See *Shima, Etsuzo. 266-139*

Ohta, Yutaka. See *Kubotera, Akira. 272-159*

272-160 **Ohta, Yutaka; Kubotera, Akira.** An example of Love waves generated by small explosions [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 2, p. 109-120, illus., 1968.

268-242 **Oide, Keiji.** Geotectonic conditions for the formation of the Krakatau-type calderas in Japan: Pacific Geology, v. 1, p. 119-135, illus., 1968.

Oide, Keishi. See *Kano, Hiroshi. 265-140*

272-120 **Oike, Kazuo; Mikumo, Takeshi.** Seismometer array method for the observation of microearthquakes in relation to local underground structures [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 54-66, illus., table, 1968.

Oike, Kazuo. See *Hashizume, Michio. 272-269*

Oike, Shoji. See *Kano, Hiroshi. 265-140*

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Okada, Akihiko. See *Shima, Makoto. 274-022*

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266-319 **Okada, Atusi; Izutuya, Sadakatu; Ito, Yutaka; Kadono, Koe.** Results of leveling resurvey between Wakayama and Kainan, Wakayama Prefecture [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 413-416, illus., table, 1968.

Okada, Atusi. See *Tsubokawa, Ietsune. 266-320*

Okada, Atusi. See *Hashizume, Michio. 272-269*

Okada, Hiroshi. See *Tazime, Kyozi. 272-156*

Okada, Yoshimitsu. See *Morimoto, Ryohei. 270-455*

272-123 **Okada, Yoshimitsu.** An amplifier for observation of microearthquakes [in Japanese]: Zisin, ser. 2, v. 21, no. 2, p. 151-153, illus., 1968.

Okamura, Akio. See *Adachi, Yukio. 265-638*

Okazaki, S. See *Torao, M. 266-305*

O'Keefe, J. A. See *Gault, D. E. 268-084*

O'Keefe, J. A. See *Gault, D. E. 275-077*

264-076 **O'Keefe, John A.** Lunar rocks: Meteoritics, v. 3, no. 3, p. 137-140, illus., 1967.

268-049 **O'Keefe, John A.** Isostasy on the Moon: Science, v. 162, no. 3860, p. 1405-1406, illus., 1968.

269-115 **O'Keefe, John A.** Water on the Moon and a new nondimensional number: Science, v. 163, no. 3868, p. 669-670, 1969.

274-047 **O'Keefe, John A.** Origin of the Moon: Jour. Geophys. Research, v. 74, no. 10, p. 2758-2767, illus., tables, 1969.

Okeke, E. O. See *Darbyshire, J. 271-498*

270-220 **Okorokov, V. V.** O dobrotnosti strunnykh kolebatel'nykh sistem [On the quality of vibrating string systems]: Geofiz. Apparatura, no. 35, p. 13-15, illus., 1968.

Okuda, H. See *Hayakawa, S. 268-056*

266-304 **Okuda, T.; Sugawa, C.** On the secular variation of latitude [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 44, 1968.

Okumura, Kiyohiko. See *Horibe, Tomio. 265-669*

268-243 **Okusa, Shigeyasu.** Sliding conditions in weak planes in the crust [with Japanese abs.]: Geol. Soc. Japan Jour., v. 74, no. 10, p. 511-520, illus., 1968.

Ol', A. I. See *Besprozvannaya, A. S. 264-355*

275-198 **Olander, V. R.; Honkasalo, T.** Computing the geoid, *in* Geodeettinen Laitos (The Finnish Geodetic Institute), 1918-1968: Suomen Geod. Lait. Jul. (Finnish Geod. Inst. Pubs.), no. 65, p. 115-122, illus., table, 1969.

272-488 **Oldale, Robert N.** Seismic investigations on Cape Cod, Martha's Vineyard, and Nantucket, Massachusetts, and a topographic map of the basement surface from Cape Cod Bay to the islands, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B122-B127, illus., 1969.

273-319 **Olea M., R.; Cisternas, A.; Kausel, E.** A study of the crust and upper mantle of northern Chile: Carnegie Inst. Washington Year Book 67, p. 357-360, illus., tables, 1969.

269-121 **O'Leary, B. T.; Rea, D. G.** The opposition effect of Mars and its implications: Icarus, v. 9, no. 3, p. 405-428, illus., 1968.

268-092 **O'Leary, Brian T.** Influence of lunar mascons on its dynamical figure: Nature, v. 220, no. 5174, p. 1309, 1968.

O'Leary, Brian T. See *Campbell, Malcolm J. 273-097*

275-062 **O'Leary, Brian T.; Pollack, James B.** A critique of the paper by Walter G. Egan, "Polarimetric and photometric simulation of the Martian surface": Icarus, v. 10, no. 2, p. 238-240, 1969.

Olive, P. See *Cheminee, J. 271-326*

265-347 **Oliver, Jack; Isacks, Bryan.** Structure and mobility of the crust and mantle in the vicinity of island arcs, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 985-991, illus., 1968.

Oliver, Jack. See *Isacks, Bryan. 266-256*

Oliver, Jack. See *Chandler, Ramesh. 269-184*

271-050 **Oliver, Jack.** Earthquake prediction—United States-Japan Cooperative Science Program: Science, v. 164, no. 3875, p. 92-93, 1969.

Oliver, Jack. See *Isacks, Bryan. 274-229*

Oliver, Jack. See *Molnar, Peter. 274-283*

Oliver, Jack. See *Sykes, Lynn R. 275-088*

Oliver, Jack. See *Isacks, Bryan. 275-103*

Oliver, Jack E. See *Alsop, L. E. 274-077*

Oliveri del Castillo, A. See *Bonasia, V. 270-216*

266-551 **Ollier, C. D.** Maars—Their characteristics, varieties and definition: Bull. Volcanol., v. 31, p. 45-73, illus., 1968.

Olofinskaya, V. N. See *Blokh, I. M. 270-152*

266-224 **Olofinskiy, L. N.** Vliyaniya rel'yefa na formy krivykh trekhelektrodnogo elektricheskogo zondirovaniya (po rezul'tatam model'nykh rabot) [Effect of relief on the shape of three-electrode electrical sounding curves (according to modeling results)]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 7, p. 124-132, illus., 1968.

Olsen, David A. See *Holland, Charles T. 268-578*

264-043 **Olsen, Edward; Fuchs, Louis.** Krinovite, $NaMg_2CrSi_3O_{10}$—A new meteorite mineral: Science, v. 161, no. 3843, p. 786-787, tables, 1968.

Olsen, Edward. See *Bunch, T. E. 268-032*

Olson, A. Peter. See *Rummerfield, Ben F. 269-595*

Olson, John V. See *Russell, Christopher T. 265-387*

265-091 **Olson, Walter S.** The Moon—Time of appearance and nearest approach to Earth [discussion of "Atmospheric and hydrospheric evolution on the primitive Earth" by P. E. Cloud, Jr., 1968]: Science, v. 161, no. 3848, p. 1364, 1968.

266-008 **Olsson, I. U.** C-14/C-12 ratio during the last several thousand years and the reliability of C-14 dates [with German abs.], *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 241-252, illus., tables, 1968.

269-029 **Olsson, I. U.; Stenberg, A.** Very high ^{14}C activity in Abisko, Sweden during summer 1965, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 69-78, illus., table, 1967.

270-009 **Olsson, Ingrid U.** Modern aspects of radiocarbon dating: Earth-Sci. Rev., v. 4, no. 3, p. 203-218, illus., table, 1968.

Olszak, Gerd. See *Baumann, Ludwig. 272-265*

270-235 **Omel'chenko, O. K.** Resheniye odnoy obratnoy zadachi dlya dvumernogo uravneniya teploprovodnosti [Solution of an inverse problem for the two-dimensional equation of heat conductivity], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 116-123, table, 1967.

Omelin, V. M. See *Gerling, V. E. 265-602*

Omes', S. P. See *Popov, V. K. 264-568*

269-706 **Omes', S. P.; Mikhaylin, A. S.** Metodika privedeniya diagramm neytronnogo gamma-karotazha k yedinym usloviyam [Procedure of reducing neutron-gamma logging diagrams to unit conditions]: Razved. Geofizika, no. 26, p. 93-100, illus., table, 1968.

269-708 **Omes', S. P.; Chuykov, A. F.** Vydeleniye gazonosnykh plastov i zon obvodneniya po izmereniyam dvumya zondami NGK v usloviyakh gazokondensatnykh mestorozhdeniy Krasnodarskogo kraya [Detecting gas-bearing formations and flooded zones from measurements by two neutron-gamma logging sondes under the conditions of the gas-condensate deposits of the Krasnodar Territory]: Razved. Geofizika, no. 27, p. 72-85, illus., table, 1968.

Onat, E. T. See *Dieterich, J. H. 273-477*

264-163 **Onda, Isao; Komaki, Shauzow.** Waves generated from a linear horizontal traction with finite source length on the surface of a semi-infinite elastic medium, with special remarks on the theory of shear wave generator [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 1, p. 1-23, illus., 1968.

O'Neill, M. See *Bolt, Bruce. 269-199*

272-016 **O'Nions, R. K.; Smith, D. G. W.; Baadsgaard, H.; Morton, R. D.** Influence of chemical composition on argon retentivity in metamorphic calcic amphiboles from south Norway: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 339-345, illus., tables, 1969.

Onishi, Koichi. See *Sakanoue, Masanobu. 269-383*

269-247 **Onodera, Seibe.** Computer calculations in resistivity sounding [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 2, p. 73-82, illus., 1968.

Onoguchi, Toshiyuki. See *Mino, Kazuo. 271-083*

Onuki, Hitoshi. See *Ueda, Yoshio. 268-026*

Onuki, Hitoshi. See *Ueda, Yoshio. 274-021*

Onuki, Hitoshi. See *Ueda, Yoshio. 275-022*

Onuma, N. See *Hamaguchi, H. 273-045*

Oostdam, B. L. See *Hoyt, John H. 275-410*

269-426 **Opdyke, N. D.** The paleomagnetism of oceanic cores, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 61-70, illus., table; discussion, p. 70-72, 1968.

Opdyke, Neil D. See *Knowles, Raymond R. 266-444*

269-304 **Opdyke, Neil D.** The Earth's mobile crust: Sci. and Technology, no. 84, p. 46-53, illus., 1968.

Opdyke, Neil D. See *Hays, James D. 275-329*

266-079 **Opik, E. J.** The building material of the planets: Irish Astron. Jour., v. 8, no. 5, p. 159-160, 1968.

266-080 **Opik, E. J.** A new look at the old Moon: Irish Astron. Jour., v. 8, no. 5, p. 160-161, 1968.

266-081 **Opik, E. J.** Mars—Fantasy and reality: Irish Astron. Jour., v. 8, no. 5, p. 162-174, tables, 1968.

266-331 **Opik, E. J.** Climatic changes and the onset of the ice ages: Irish Astron. Jour., v. 8, no. 5, p. 153-157, 1968.

265-380 **Opp, Albert G.** Penetration of the magnetopause beyond 6.6 R_E during the magnetic storm of January 13-14, 1967—Introduction: Jour. Geophys. Research, v. 73, no. 17, p. 5697-5698, illus., 1968.

Orange, A. S. See *Brace, W. F. 264-188*

274-166 **Orange, Arnold S.** Granitic rocks—Properties in situ: Science, v. 165, no. 3889, p. 202-203, 1969.

264-252 **Oray, E.; Sanderson, D.** Application of the gravity method to the study of a collapse feature in Grand Rapids, Michigan: Compass, v. 45, no. 1, p. 6-10, illus., 1967.

O'Reilly, W. See *Sakamoto, N. 266-457*

Orekhov, O. R. See *Bragin, A. A. 266-573*

Orekhov, O. R. See *Mesropyan, V. S. 270-520*

264-166 **Orellana Silva, Ernesto.** Un ábaco para el trazado de curvas de resistividad aparente [A template for plotting apparent resistivity curves (with English abs.)]: Rev. Geofísica, v. 26, nos. 101-102, p. 1-8, illus., 1967.

264-167 **Orellana Silva, Ernesto.** Normas prácticas para el ejecución de sondeos eléctricos verticales [Practical standards for the execution of vertical electrical soundings (with English abs.)]: Rev. Geofísica, v. 26, nos. 101-102, p. 9-20, illus., table, 1967.

Orkild, P. P. See *Ekren, E. B. 271-023*

Orkild, Paul P. See *Noble, Donald C. 264-392*

268-564 **Orlenok, V. V.** O stroyenii zemnoy kory severnoy chasti Atlanticheskogo okeana po seysmicheskim dannym [On the crustal structure of the northern part of the Atlantic Ocean according to seismic data (with English summ.)]: Okeanologiya, v. 8, no. 2, p. 245-256, illus., 1968.

273-037 **Orliac, Jacques; Schafer, Karlheinz.** Das Rubidium-Strontium-Alter underpermischer Rhyolithe des Saar-Nahe-Gebiets [The rubidium-strontium age of Lower Permian rhyolites of the Saar-Nahe region (with English and French summ.)]: Neues Jahrb. Geologie u. Palaontologie Monatsh., no. 4, p. 246-252, illus., 1969.

264-246 **Orlin, H.** Marine gravity surveying instruments and practice, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Government Printing Office, p. 181-187, illus., tables, 1967.

Orlin, Hyman. See *McAlinden, John M. 274-454*

Orlov, A. N. See *Gaponenko, G. I. 273-207*

269-085 **Orlov, I. V.; Gabay, N. L.; Krasnobayev, A. A.; Rozen, O. M.; Serykh, V. I.** Primeneniye al'fa-svintsovogo metoda absolyutnogo datirovaniya gornykh porod pri geologicheskikh issledovaniyakh v Tsentral'nom Kazakhstane [Use of the lead-alpha method of absolute dating of rocks in geologic investigations in central Kazakhstan]: Sovetskaya Geologiya, no. 9, p. 87-94, tables, 1968.

Orlov, L. I. See *Garris, M. A. 267-051*

273-107 **Orowan, E.** Density of the Moon and nucleation of planets: Nature, v. 222, no. 5196, p. 867, 1969.

272-325 **Orr, David; Barsczus, Hans G.** Geomagnetic micropulsations, pi2, at low latitudes: Planetary and Space Sci., v. 17, no. 3, p. 497-507, illus., 1969.

Osada, Kaio. See *Kanai, Kiyoshi. 266-140*

Osada, Kaio. See *Tanaka, Teiki. 271-080*

Osada, Kaio. See *Tanaka, Teiji. 271-082*

Osawa, Yutaka. See *Tanaka, Teiji. 271-082*

Osborne, D. G. See *Emeleus, T. G. 265-461*

265-393 **Osborne, Denis G.** Some further correlations in magnetic variation: Jour. Atmos. and Terrest. Physics, v. 30, no. 8, p. 1479-1486, illus., tables, 1968.

266-426 **Osemeikhian, J. E. A.; Everett, J. E.** Anomalous magnetic variations in southwestern Scotland: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 361-366, illus., table, 1968.

Osinskaya, S. V. See *Yegorov, Yu. M. 264-144*

Osipenko, V. A. See *Rapoport, M. B. 266-523*

Osipenko, V. A. See *Chervonskiy, M. I. 266-524*

264-354 **Osipov, N. K.; Fedorov, A. N.** K voprosu o zapadnom dreyfe geomagnitnogo polya [On the problem of westward drift of the geomagnetic field]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 97-101, illus., 1967.

265-475 **Osipov, Yu. M.** Raschet kompensatsionnykh elementov dlya sostavlyayushchikh induktivnykh pomekh [Calculation of the compensation elements for the components of inductive noise]: Geofiz. Apparatura, no. 32, p. 126-130, illus., tables, 1967.

267-468 **Osipov, Yu. M.** Vybor optimal'noy konstruktsii kompensatora induktivnykh pomekh [Choice of optimum construction of an inductive noise compensator]: Razved. Geofizika, no. 26, p. 77-81, illus., 1968.

267-469 **Osipov, Yu. M.** Raschet kompensatora induktivnykh pomekh na permalloyevykh elementakh [Calculation of an inductive noise compensator of permalloy elements]: Razved. Geofizika, no. 27, p. 48-53, illus., tables, 1968.

267-473 **Osipov, Yu. M.** Analiz pogreshnostey kompensatora induktivnykh pomekh [Analysis of errors in the inductive noise compensator]: Geofiz. Apparatura, no. 34, p. 106-110, illus., 1967.

271-396 **Osipov, Yu. M.** Sposoby umen'sheniya metodicheskoy pogreshnosti kompensatora induktivnykh pomekh [A method of decreasing the methodological error of an inductive noise compensator]: Geofiz. Apparatura, no. 31, p. 181-187, illus., tables, 1967.

265-204 **Osipova, B. A.** Opredeleniye uprugikh svoystv kamennoy soli impul'snym seysmicheskim metodom [Determination of the elastic properties of rock salt by the seismic pulse method]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 70-73, illus., tables, 1968.

Oskorbin, L. S. See *Solov'yev, S. L. 265-174*

Osmond, J. K. See *Holmes, Charles W. 264-009*

267-340 **Osmond, J. K.; Rydell, H. S.; Kaufman, M. I.** Uranium disequilibrium in ground water—An isotope dilution approach in hydrologic investigations: Science, v. 162, no. 3857, p. 997-999, illus., table, 1968.

Osnach, A. I. See *Zharkov, V. N. 267-150*

274-475 **Osoba, J. S.; VonGonten, W. D.** Measurement of SP in nonconducting mud, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans., Supp.: Houston, Tex., Soc. Prof. Well Log Analysts, p. F1-F12, illus., 1969.

Ossaka, Joyo. See *Morimoto, Ryohei. 270-455*

268-363 **Ossakow, Sidney L.** Anomalous resistivity along lines of force in the magnetosphere: Jour. Geophys. Research, v. 73, no. 19, p. 6366-6369, table, 1968.

Ossing, Henry A. See *Crowley, Francis A. 269-610*

Ostach, O. M. See *Brovar, V. V. 268-210*

Ostanevich, Yu. M. See *Levskiy, L. K. 272-066*

Ostapchuk, O. S. See *Kulinkovich, A. Ye. 268-644*

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Ostic, R. G. See *Russell, R. D. 266-417*

Ostic, R. G. See *Russell, R. D. 275-297*

275-177 **Ostistyy, B. K.; Ignatov, M. N.; Sheremeta, O. O.; Mishakov, G. S.; Yevdokimova, T. I.; Ravdonikas, O. V.; Ruban, V. G.; Telegin, A. N.; Tronov, Yu. A.** Perspektivy neftegazonosnosti Langryyskogo rayona Zapadno-Sakhalinskogo antiklinoriya i zapadnogo obramleniya Baykal'skoy depressii [Oil and gas prospects of the Langryy region of the West Sakhalin anticlinorium and the western framework of the Baykal depression]: Geologiya Nefti i Gaza, no. 2, p. 34-38, illus., 1969.

265-683 **Ostrovskiy, M. I.; Ovanova, T. D.** Korrelyatsiya otlozheniy ordovika i srednego kembriya na territorii Moskovskoy sineklizy v svyazi s neftepoiskovymi rabotami [Correlation of the Ordovician and Middle Cambrian formations in the territory of the Moscow syneclise in connection with oil prospecting work]: Razved. Geofizika, no. 24, p. 83-88, illus., 1968.

O'Sullivan, R. J. See *Cummings, W. D. 269-388*

265-419 **Ota, Masaziro.** Spacial noise of geomagnetic diurnal variation: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 39-43, illus., 1967.

Otamn, N. S. See *Vasil'yeva, I. L. 275-254*

264-264 **Otroshko, Ye. N.** Paletka dlya vychisleniya V_{xz} ot dvykhmernykh tel [A master curve for calculating V_{xz} from two-dimensional bodies]: Razved. Geofizika, no. 23, p. 80-83, illus., tables, 1967.

Ottaviani, Mario. See *Kuo, John T. 274-255*

Ottemann, J. See *ElGoresy, Ahmed L. 273-089*

Otto, J. B. See *Burke, W. H. 270-001*

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265-048 **Ovchinnikov, L. N.; Dunayev, V. A.; Krasnobayev, A. A.; Stepanov, A. I.** Vozrastnaya zonal'nost' Urala po radiologicheskim dannym [Age zonation of the Urals according to radiological data]: Akad. Nauk SSSR Doklady, v. 180, no. 1, p. 185-188, illus., 1968.

265-049 **Ovchinnikov, L. N.; Shur, A. S.; Baranov, B. V.** Opyt opredeleniya vozraste magnetita al'fa-geliyevym metodom [Attempt to determine the age of magnetite by the alpha-helium method]: Akad. Nauk SSSR Doklady, v. 180, no. 2, p. 466-468, illus., table, 1968.

267-050 **Ovchinnikov, L. N.; Dunayev, V. A.** O drevneyshey glubinnoy porode Urala [On the oldest deep rocks of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 200-209, illus., tables, 1968.

Ovchinnikova, G. V. See *Levchenkov, O. A. 265-050*

Ovchinnikova, G. V. See *Shukolyukov, Yu. A. 267-368*

Ovdina, G. K. See *Arkhipov, V. I. 267-278*

270-252 **Oversby, V. M.; Gast, P. W.** Lead isotope compositions and uranium decay series disequilibrium in recent volcanic rocks: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 199-206, tables, 1969.

272-003 **Oversby, V. M.; Gast, P. W.** Ocean basalt leads and the age of the Earth: Science, v. 162, no. 3856, p. 925-927, illus., 1968.

270-464 **Overton, Harold L.; Smith, Dale.** Acoustic travel time in cored basalt: Log Analyst, v. 7, no. 2, p. 25-28, illus., tables, 1966.

270-470 **Overton, Harold L.; Moczygemba, Max.** Some mechanical properties of homogeneous and heterogeneous basalt: Log Analyst, v. 8, no. 1, p. 22-28, illus., tables, 1967.

270-477 **Overton, Harold L.** Formation evaluation in engineering education: Log Analyst, v. 9, no. 2, p. 14-15, 1968.

273-501 **Overton, Harold L.; Gupta, Yugal.** Shaly sand logging and ionic absorption: Log Analyst, v. 10, no. 2, p. 3-6, illus., 1969.

274-479 **Overton, Harold L.; Norman, Carl.** Reservoir pore volume compressibility calculated by traveltime log, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. M1-M10, table, 1969.

270-469 **Owen, Joe D.** A review of fundamental nuclear physics applied to gamma ray spectral logging: Log Analyst, v. 7, no. 3, p. 37-49, illus., tables, 1966.

264-068 **Owen, Tobias.** Ice on Venus—Can it exist,: Science, v. 161, no. 3844, p. 915, 1968.

271-567 **Ower, D. Ted.** First Canadian research on electrical well logging: Canadian Petroleum, v. 10, no. 2, p. 23-26, illus., 1969.

Oxburgh, E. R. See *Turcotte, D. L. 269-303*

Oxburgh, E. R. See *Turcotte, D. L. 271-178*

Oyama, Shiro. See *Ogawa, Itsuro. 265-234*

265-179 **Ozawa, Izuo.** On the extensometer whose magnifier is a Zöllner suspension type tiltmeter, and the observations of the Earth's strains by means of the instruments: Annali Geofisica, v. 18, no. 3, p. 263-278, illus., 1965.

265-181 **Ozawa, Izuo.** Observation of the atmospheric tide effects on the Earth's deformation: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 133-142, illus., table, 1967.

Ozawa, Keijiro. See *Tomoda, Yoshibumi. 264-426*

Ozawa, Keijiro. See *Segawa, Jiro. 264-427*

Ozawa, T. See *Iwasaki, I. 268-317*

Ozawa, Takejiro. See *Iwasaki, Iwaji. 266-504*

275-285 **Ozerova, N. A.; Aydin'yan, N. Kh.; Vinogradov, V. I.** Izotopnyy sostav sery rtutnykh mestorozhdeniy [Isotopic composition of the sulfur of mercury deposits], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 84-107, illus., tables, 1967.

264-404 **Ozima, M.; Kaneoka, I.; Kono, M.; Kinoshita, H.; Kobayashi, K.; Ohnaka, N.; Nagata, T.** Paleomagnetism and K-Ar ages of successive lava flows—[Pt.] 2, Kita-

Matsuura basalt, Kyushu, Japan: Jour. Geomagnetism and Geoelectricity, v. 20, no. 2, p. 85-92, illus., tables, 1968.

264-406 **Ozima, M.; Kaneoka, I.; Kono, M.; Kinoshita, H.; Kobayashi, K.; Ohnaka, Y.; Nagata, T.** Paleomagnetism and K-Ar ages of successive lava flows—[Pt.] 3, Hanamagari and Kirizumi andesites, Gumma Prefecture, Japan: Jour. Geomagnetism and Geoelectricity, v. 20, no. 2, p. 101-105, illus., tables, 1968.

268-027 **Ozima, M.; Ueno, N.; Shimizu, N.; Kuno, H.** Rb-Sr and K-A isotopic investigations of the Sidara granodiorites and the associated Ryoke metamorphic belt, central Japan: Japanese Jour. Geology and Geography, v. 38, nos. 2-4, p. 159-162, illus., table, 1967.

Ozima, Minoru. See *Kaneoka, Ichiro. 264-036*

Ozima, Minoru. See *Larson, E. 273-379*

Ozima, Mituko. See *Kaneoka, Ichiro. 264-036*

Ozima, Mituko. See *Larson, E. 273-379*

266-555 **P. L.; Matumoto, T.** A summary of volcanic and seismic activity in Katmai National Monument, Alaska: Bull. Volcanol., v. 31, p. 107-129, illus., tables, 1968.

268-177 **Páal, Gustav.** Very low frequency measurements in northern Sweden: Geoexploration, v. 6, no. 3, p. 141-149, illus., 1968.

Pachiaudi, Ch. See *Evin, J. 271-009*

270-122 **Padilla M., Domingo A.** Algunas consideraciones sobre la utilidad de la geofísica aplicada para exploraciones de aguas subterráneas [Some considerations of the utility of applied geophysics in exploration of subterranean waters]: Soc. Venezolana Géólógos Bol., v. 3, no. 1, p. 3-7, 1968.

Padurets, G. S. See *Ye. D. 264-510*

Pagani, A. See *Donville, B. 269-018*

267-161 **Page, Leo M.** Use of the electrical resistivity method for investigating geologic and hydrologic conditions in Santa Clara County, California: Ground Water, v. 6, no. 5, p. 31-40, illus., table, 1968.

273-167 **Page, Leo M.** The use of the geoelectric method for investigating geologic and hydrologic conditions in Santa Clara County, California: Jour. Hydrology, v. 7, no. 2, p. 167-177, illus., table, 1969.

268-016 **Page, Neil R.** Atlantic early sub-Boreal glaciation in Norway: Nature, v. 219, no. 5155, p. 694-697, illus., 1968.

272-107 **Page, Robert.** (editor). Proceedings of the second United States-Japan conference on research related to earthquake prediction problems: Palisades, New York, Lamont Geological Observatory, 106 p., illus., tables, 1966.

Paisova, E. K. See *Babak, V. I. 271-251*

Pak, V. A. See *Butovskaya, Ye. M. 269-373*

Pakhomenko, E. I. See *Dvorak, Zbynek. 272-175*

267-172 **Pakhomov, V. F.** O geologicheskom stroyenii yugo-vostochnoy chasti Ryazano-Saratovskogo progiba po dannym elektrorazvedki metodami ZSM i MTP v svyazi s perspektivami neftegazonosnosti [On the geology of the southeastern part of the Ryazan-Saratov depression according to data of electrical surveys by the magnetic field buildup sounding and magnetotelluric profiling methods in connection with prospects of oil- and gas-bearing capability]: Neftegazovaya Geologiya i Geofizika, no. 9, p. 32-36, illus., 1968.

267-576 **Pakiser, L. C.** Seismic evidence for the thickness of Cenozoic deposits in Mono Basin, California: Geol. Soc. America Bull., v. 79, no. 12, p. 1833-1838, illus., 1968.

Paklinov, V. A. See *Blankov, Ye. B. 272-563*

Pal, S. See *Venkatasubramanian, V. S. 275-008*

Palandzhyan, S. A. See *Melikyan, L. S. 265-053*

269-174 **Palas, Miroslav.** Preliminary considerations on the trend of metallogenic processes in respect to the evolutionary stages of planets: Ostrava Vysoké Školy Báňske, Sborník Věd. Prací, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 103-108, 1968.

270-436 **Palausi, Guy.** Au sujet de la tête du canyon sous-marin de la Siagne (Alpes-Maritimes)—Note preliminaire [On the subject of the head of the submarine canyon of Siagne (Alpes-Maritimes)—Preliminary note]: Soc. Geol. France Compte Rendu, 1967, no. 8, p. 342-343, 1968.

Pal'gov, N. N. See *Makarevich, K. G. 275-220*

275-067 **Palm, Ann.** The evolution of Venus' atmosphere: Planetary and Space Sci., v. 17, no. 5, p. 1021-1028, illus., tables, 1969.

Palmason, Gudmundur. See *Ward, Peter L. 269-181*

270-118 **Palmason, Gudmundur.** Invited comments, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 817-820, illus., 1968.

Palmer, C. Sweet. See *Johnson, Stanley S. 275-228*

272-359 **Palmer, H. C.** The paleomagnetism of the Croker Island complex, Ontario, Canada: Canadian Jour. Earth Sci., v. 6, no. 2, p. 213-218, illus., table, 1969.

267-218 **Palmer, Harold.** East Pacific Rise and westward drift of North America: Nature, v. 220, no. 5165, p. 341-345, illus., 1968.

Palmer, Harold D. See *Moore, David G. 269-611*

Palmer, K. R. See *Dawson-Grove, G. E. 270-492*

273-265 **Palmer, Leonard A.** Marine terrace deformation in Pacific coastal United States, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 69-81, illus., 1967.

267-131 **Panasenko, G. D.** Nekotoryye osobennosti seysmichnosti severo-vostochnoy chasti Baltiyskogo shchita [Some features of the seismicity of the northeastern part of the Baltic shield], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 17-21, illus., tables, 1968.

267-132 **Panasenko, G. D.; Kolomiyets, A. S.; Pylayeva, T. A.** Vliyaniye yemkostnykh fil'trov na chastotnuyu kharakteristiku seysmografa SKM-3 [Effect of capacitance filters on the frequency characteristic of the SKM-3 seismograph], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 26-36, illus., table, 1968.

265-617 **Panciroli, Francesco A.; Arnaud, Maurice L.** Nouvelle methode de restitution d'une horizon refracteur par sismique refraction [New method of determining a refracting horizon by seismic refraction (with English summ.)]: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 269-276, illus., 1968.

Panichi, C. See *Gonfiantini, R. 267-342*

Panichi, C. See *Fornaca-Rinaldi, G. 264-310*

274-299 **Pankhurst, R. J.** Strontium isotope studies related to petrogenesis in the Caledonian basic igneous province of NE Scotland: Jour. Petrology, v. 10, no. 1, p. 115-143, illus., 1969.

Pankina, R. G. See *Mekhtiyeva, V. L. 267-372*

269-380 **Pankina, R. G.; Maksimov, S. P.; Churmanteyeva, M. N.** Einige Fragen der Herkunft des Erdöls nach Angaben uber den Isotopenbestand des Schwefels [Some problems of the origin of petroleum according to data on the isotopic composition of sulfur]: Zeitschr. Angew. Geologie, v. 14, no. 8, p. 417-420, illus., tables, 1968.

275-279 **Pankina, R. G.; Maksimov, S. P.** Sootnosheniye izotopov sery v svyazi s osobennostyami obrazovaniya neftey Pripyatskogo progiba [Sulfur isotope ratios in connection with the features of formation of the oils of the Pripyat depression]: Geologiya Nefti i Gaza, no. 2, p. 45-50, illus., tables, 1969.

Pankina, R. G. See *Yeremenko, N. A. 275-291*

Pankov, Yu. L. See *Valuyskiy, A. A. 270-517*

Pankrushin, V. K. See *Karatayeu, G. I. 266-330*

267-136 **Pannella, Giorgio; MacClintock, Copeland; Thompson, Maxwell N.** Paleontological evidence of variations in length of synodic month since Late Cambrian: Science, v. 162, no. 3855, p. 792-796, illus., table, 1968.

272-129 **Pannella, Giorgio; MacClintock, Copeland.** Stratigraphic data and the length of the synodic month: Science, v. 164, no. 3876, p. 202, 1969.

Pannocchia, G. See *DePanfilis, M. 273-128*

271-249 **Panov, D. G.** Neotektonicheskoye rayonirovaniye Volgo-Donskikh ravnin [Neotectonic zoning of the Volga-Don Plains], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 184-191, illus., 1968.

274-345 **Panov, T. N.** Eleven-year geomagnetic activity cycle, according to the data of Sverdlovsk Magnetic Observatory for 1943-1966: Geomagnetism and Aeronomy, v. 8, no. 6, p. 910-911, illus., table, 1968.

Panova, M. V. See *Dunayev, V. A. 267-043*

Panteleyev, A. I. See *Apel'tsin, F. R. 267-038*

264-269 **Panteleyev, V. L.; Smirnov, L. P.** Optiko-mekhanicheskiy gravimetr OMG [The OMG optical-mechanical gravimeter]: Prikladnaya Geofizika, no. 51, p. 115-123, illus., tables, 1968.

Panteleyev, V. L. See *Bobrov, Yu. V. 268-278*

268-279 **Panteleyev, V. L.** K teorii avtomaticheskogo gravimetra ANG [On the theory of the ANG automatic gravimeter]: Prikladnaya Geofizika, no. 52, p. 151-159, illus., 1968.

268-231 **Pantó, Gábor D.** Crustal development and mean intrusion level, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 2, Volcanism and tectogenesis: Prague, Academia, p. 99-105, 1968.

Pantyukhin, G. S. See *Dublyanskiy, V. M. 266-226*

Papalashvili, V. G. See *Tskhakaya, A. D. 265-166*

272-047 **Papanastassiou, D. A.; Wasserburg, G. J.** Initial strontium isotopic abundances and the resolution of small time differences in the formation of planetary objects: Earth and Planetary Sci. Letters, v. 5, no. 6, p. 361-376, illus., tables, 1969.

265-124 **Papazachos, B.; Delibasis, N.; Liapis, N.; Moumoulidis, G.; Purcaru, G.** Aftershock sequences of some large earthquakes in the region of Greece: Annali Geofisica, v. 20, no. 1, p. 1-93, illus., tables, 1967.

Papazachos, B. See *Comninakis, P. 274-121*

266-031 **Papon, André; Roques, Maurice; Vachette, Michelle.** Age de 2700 millions d'années, détermine par la méthode au strontium, pour la série charnockitique de Man, en Cote-d'Ivoire [A strontium age of 2700 m.y. for the Man charnockite series on the Ivory Coast]: Acad. Sci. Comptes Rendus, ser. D, v. 266, no. 20, p. 2046-2048, illus., tables, 1968.

270-123 **Paradela, Pedro Lopes.** Localização de um algar (olho de Mira d'Aire) por metodos geofisicos, a partir de uma galeria de mina aberta no fundo de um poço [Location of the subterranean course (orifice of Mira d'Aire) by geophysical methods, by means of a gallery dug from the bottom of a well]: Bol. Minas, v. 5, no. 3, p. 225-226, 1968.

266-453 **Parasnis, D. S.** Indirect evidence of two magnetic phases in certain natural pyrrhotite samples: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 435-436, table, 1968.

274-225 **Parasnis, D. S.** A supplementary comment on R. Green's note, "The EAEG's choice of units," Geophysical Prospecting 1968, v. XVI, p. 1-3: Geophys. Prosp. [Netherlands], v. 16, no. 3, p. 392-394, 1968.

271-541 **Parate, N. S.** Critère de rupture des roches fragiles [Criteria of brittle fracture of rocks (with English, German, Spanish abs.)]: Inst. Tech. Bâtiment et Travaus Publics Annales, v. 22, no. 253, p. 147-160, illus., tables, 1969.

264-240 **Paren, J. G.** Dielectric relaxation in temperate glaciers—Comments on Dr. P. W. F. Gribbon's paper [1967]: Jour. Glaciology, v. 7, no. 50, p. 341-346, illus., tables, 1968.

275-397 **Pariseau, William G.** The post-yield flexure of geologic strata: Soc. Mining Engineers Trans., v. 244, no. 2, p. 203-209, tables, 1969.

Pariyskiy, B. S. See *Mikhaylova, N. G. 266-197*

266-198 **Pariyskiy, B. S.** Obratnaya zadacha dlya volnovogo uravneniya s vozdeystviyem na glubine [Inverse problem for the wave equation with activity at depth], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 139-169, illus., table, 1968.

271-148 **Park, Charles F., Jr.; Freeman, Margaret C.** Affluence in jeopardy—Minerals and the political economy: San Francisco, Calif., Freeman, Cooper and Co., 368 p., illus., tables, 1968.

265-452 **Park, Frederick B.** Remanent magnetism and the anomaly at Cottoner Mountain, Madison County, Missouri: Geophysics, v. 33, no. 4, p. 613-620, illus., table, 1968.

Park, J. K. See *Roy, J. L. 269-420*

Park, J. K. See *Robertson, W. A. 269-432*

Park, J. K. See *Robertson, W. A. 272-358*

265-146 **Park, Soo Hi.** Felt earthquakes in Korea in these 30 years, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 69-74, illus., tables, 1966.

270-111 **Parker, D. C.** Remote sensing for engineering investigations of terrain—Infrared systems, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 701-709, illus., 1968.

272-306 **Parker, E. N.** Solar wind interaction with the geomagnetic field, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 3-10, 1969.

Parkhomenko, E. I. See *Delitsyn, I. S. 268-166*

Parkhomenko, E. I. See *Volarovich, M. P. 268-183*

272-045 **Parkin, David W.** Airborne dust collections at remote sites: Planetary and Space Sci., v. 17, no. 3, p. 575-578, illus., table, 1969.

274-106 **Parkin, Ernest J.** Horizontal crustal movements determined from surveys after the Alaskan earthquake of 1964, *in* The Prince William Sound, Alaska, earthquake of 1964 and aftershocks, V. 3: U.S. Coast and Geod. Survey Pub. 10-3, p. 35-98, illus., tables, 1969.

265-389 **Parks, G. K.; Winckler, J. R.** Acceleration of energetic electrons observed at the synchronous altitude during magnetospheric substorms: Jour. Geophys. Research, v. 73, no. 17, p. 5786-5791, illus., 1968.

265-408 **Parks, George K.; McPherron, R. L.; Coroniti, F. V.** Relation of energetic electron precipitation and geomagnetic micropulsation to auroral substorms [with French abs.]: Annales Geophysique, v. 24, no. 2, p. 621-627, illus., 1968.

Parks, R. See *Blundell, D. J. 271-512*

275-124 **Parmelee, Richard A.; Perelman, David S.; Lee, Seng-Lip.** Seismic response of multiple-story structures on flexible foundations: Seismol. Soc. America Bull., v. 59, no. 3, p. 1061-1070, illus., tables, 1969.

Parry, J. R. See *Ward, S. H. 265-210*

Pasechnik, V. I. See *Berzon, I. S. 267-149*

Pashkevich, I. K. See *Krutikhovskaya, Z. A. 271-398*

266-223 **Pas'ko, E. V.** Ob odnom printsipe postroyaniya izmeritel'noy apparatury dlya elektrorazvedki metodom yestestvennykh elektromagnitnykh poley [On a principle of constructing measuring apparatus for electrical surveying by the method of natural electromagnetic fields]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 7, p. 104-109, illus., 1968.

273-268 **Paskoff, Roland.** Recent state of investigations on Quaternary sea levels along the Chilean coast between lat 30° and 33° S., *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 107-113, illus., 1967.

274-012 **Pasteels, P.; Michot, J.** Nouveaux résultats géochronologiques obtenus par la méthode U-Pb sur des zircons des Monts Sör-Rondane (Antarctique) [New geochronologic results obtained by the U-Pb method on some zircons of the Sör-Rondane Mountains (Antarctica) (with English abs.)]: Soc. Géol. Belique Annales, v. 91, pt. 3, p. 283-303, illus., tables, 1968.

Pasteels, P. See *Ledent, D. 274-013*

Pasteels, P. See *Cahen, L. 274-014*

268-593 **Patalakha, Ye. I.** O vozmozhnosti ispol'zovaniya deformatsionnykh strukturnykh elementov v kachestve "tektonicheskikh tenzodatchikov" [On the possibility of using deformational structural elements as "tectonic strain sensors"], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 68-76, illus., 1968.

273-277 **Patalakha, Ye. I.** Kongruentnyye dopolnitel'nyye skladki laminarnogo techeniya v eksperimente [Congruent supplementary folds of laminar flow in experiment (with English summ., p. 158)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 120-123, illus., 1968.

275-401 **Patching, T. H.; Coates, D. F.** A recommended rock classification for rock mechanics purposes: Canadian Mining and Metall. Bull., v. 61, no. 678, p. 1195-1197, 1968; Canadian Inst. Mining and Metallurgy Trans. 1968, v. 71, p. 305-307, 1968.

Patra, H. P. See *Bhattacharya, P. K. 270-124*

Patriat, Ph. See *Schlich, R. 267-460*

Patsula, I. M. See *Mirchink, M. F. 269-278*

Patterson, J. H. See *Franzgrote, E. J. 268-083*

Patterson, James H. See *Turkevich, Anthony L. 265-094*

Patterson, James H. See *Turkevich, Anthony L. 270-048*

Patterson, James H. See *Turkevich, Anthony L. 275-055*

Patterson, James H. See *Turkevich, Anthony L. 275-076*

274-438 **Patzer, Ulrich; Grässl, Steffen.** Reflexionsseismische Messungem mit Transversalwellen zur Erkundung der Lagerungsverhältnisse im Vorfeld eines Braunkohlentagebaus [Seismic reflection measurements with transverse waves for the investigation of the bedding relationships in the forefield of an open-cut lignite mine (with English and Russian summ.)]: Zeitschr. Angew. Geologie, v. 15, no. 4, p. 196-201, illus., 1969.

265-229 **Pauca, Mircea M.** Mesure directe de la résistivité électrique du sol par la méthode de la comparaison en circuits indépendants [Direct measurement of the electrical resistivity of the ground by the method of comparison in independent circuits]: Rev. Roumaine Géologie, Géophysique Géographie, Ser. Géophysique, v. 12, no. 1, p. 53-68, illus., 1968.

Paul, D. R. See *Cooney, P. M. 272-170*

275-226 **Paul, M. K.** Reply by author to discussion [of 1967 paper] by K. Biesheuvel [1969]: Geophysics, v. 34, no. 3, p. 483-485, 1969.

264-172 **Paul, P. C.; Sogani, K. C.** Electromagnetic and magnetic studies for lead ore in the Shishkhani area, Almorea district, Uttar Pradesh, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 49-65, illus., 1966.

264-484 **Paul, P. C.** Preliminary seismic refraction studies to determine the depth to bedrock in the Suketi Basin, Mandi district, Himachal Pradesh, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 93-107, illus., 1966.

265-624 **Paul, P. C.; Dutta, N. P.** Electrical resistivity and seismic refraction studies for ground water in the Jodhpura area, Rajasthan: Pure and Appl. Geophysics, v. 69, p. 131-142, illus., tables, 1968.

272-533 **Paul, R. H.** Formation water saturation in gas reservoirs—A comparison of log data derived from extracted oil base cores, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. I1-I13, illus., 1968.

265-384 **Paulikas, G. A.; Blake, J. B.; Freden, S. C.; Imamoto, S. S.** Boundary of energetic electrons during the January 13-14, 1967, magnetic storm: Jour. Geophys. Research, v. 73, no. 17, p. 5743-5750, illus., table, 1968.

272-298 **Paulikas, G. A.; Blake, J. B.** Penetration of solar protons to synchronous altitudes: Jour. Geophys. Research, v. 74, no. 9, p. 2161-2168, illus., table, 1969.

267-592 **Pavlenkov, A. I.** Graficheskiy sposob postroyeniya otrazhayushchey granitsey s uchetom prelomleniya [A graphic method of plotting reflecting boundaries taking into account refraction]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 99-102, illus., 1968.

Pavlenkov, A. I. See *Krylov, S. V. 269-633*

270-411 **Pavlenkov, A. I.; Berdnikov, V. A.** Kompleksirovaniye zondirovaniy otrazhennykh i prelomlennykh voln s tsel'yu poiskov lokal'nykh struktur i kartirovaniya poverkhnosti fundamenta v Zapadno-Sibirskoy nizmennosti [Combination of reflection and refraction soundings for the purpose of prospecting for local structures and mapping the basement surface in the West Siberian Lowland (with English summ., p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 96-99, illus., 1968.

270-406 **Pavlenkova, N. I.** Registratsii poperechnykh voln ot granits zemnoy kory [Registration of transverse waves from crustal boundaries (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 63-71, illus., 1968.

Pavlogradskiy, V. A. See *Volarovich, M. P. 268-159*

272-377 **Pavlov, A. V.; Shuplyakova, V. P.; Vozhakova, L. V.** Plotnost' i magnitnaya vospriimchivost' yursko-melovykh otlozheniy Leno-Anabarskogo progiba [Density and magnetic susceptibility of the Jurassic-Cretaceous formations of the Lena-Anabar depression]: Nauchno-Issled. Inst. Geologii Arktiki, Uchenyye Zapiski, Regional'naya Geologiya, no. 13, p. 175-188, tables, 1968.

Pavlov, Yu. A. See *Tuyezov, I. K. 266-402*

Pavlov, Yu. A. See *Tuyezov, I. K. 268-354*

Pavlov, Yu. P. See *Vedekhin, A. F. 267-639*

Pavlov, Yu. P. See *Vedekhin, A. F. 270-521*

268-597 **Pavlova, N. N.; Shreyner, L. A.** Vliyaniye skorosti na protsessy deformatsii i razrusheniya gornykh porod v usloviyakh ob"yemno-napryazhennogo sostoyaniya [Effect of rate on the process of deformation and destruction of rocks under conditions of the volumetrically stressed state] *in* Simposium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 193-197, illus., table, 1968.

268-598 **Pavlova, N. N.; Kuz'menkova, G. Ye.** Issledovaniya prochnosti i plastichnosti porod kristallicheskogo fundamenta Russkoy platformy pri vysokikh davleniyakh [Investigations of the porosity and plasticity of rocks of the crystalline basement of the Russian platform under high pressures], *in* Simposium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 197-207, illus., tables, 1968.

271-204 **Pavlova, T. G.** Tektonicheskoye polozheniye granitoidnykh formatsiy geosinklinal'nykh sistem [Tectonic position of the granitoid formations of geosynclinal systems (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 32-36, 1968.

269-212 **Pavlovskaya, M. P.** Programma opredeleniya gipotsentrov zemletryaseniy v Uzbekistane na EVM "Minsk-2" [Program of determination of earthquake focuses in Uzbekistan on the Minsk-2 computer]: Uzbek. Geol. Zhur., no. 4, p. 66-68, illus., table, 1968.

Payne, B. R. See *Davis, G. H. 264-317*

272-250 **Payo Subiza, Gonzalo.** Crustal structure of the Mediterranean Sea—Pt. 2, Phase velocity and travel times: Seismol. Soc. America Bull., v. 59, no. 1, p. 23-42, illus., tables, 1969.

274-419 **Peacock. K. L.; Treitel, Sven.** Predictive deconvolution—Theory and practice: Geophysics, v. 34, no. 2, p. 155-169, illus., 1969.

264-077 **Peacock, Keith.** Multicolor photoelectric photometry of the lunar surface: Icarus, v. 9, no. 1, p. 16-66, illus., 1968.

Peake, W. H. See *Muhleman, D. O. 275-075*

268-091 **Peale, Stanton J.; Schubert, Gerald; Lingenfelter, Richard E.** Distribution of sinuous rilles and water on the Moon: Nature, v. 220, no. 5173, p. 1222-1225, illus., 1968.

Peale, Stanton J. See *Lingenfelter, Richard. 274-054*

Pearce, D. C. See *Walker, J. W. 267-158*

272-357 **Pearce, G. W.; Freda, G. N.** Magnetization of the Perry Formation of New Brunswick, and the rotation of Newfoundland—Discussion [of 1965 paper by W. A. Robertson, J. L. Roy, and J. K. Park]: Canadian Jour. Earth Sci., v. 6, no. 2, p. 353-355, table, 1969.

Pearce, G. W. See *Larochelle, A. 273-377*

271-180 **Pease, R. W.** Normal faulting and lateral shear in northeastern California: Geol. Soc. America Bull., v. 80, no. 4, p. 715-719, illus., 1969.

Pease, Thomas E. See *Greenwood, J. Arthur. 273-169*

Pease, Thomas E. See *Greenwood, J. Arthur. 273-170*

Pec, K. See *Wickens, A. J. 269-602*

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Pechorin, V. P. See *Ab, E. A. 270-525*

Pechorin, V. P. See *Ab, E. A. 270-526*

267-617 **Peck, Dallas L.; Minakami, Takeshi.** The formation of columnar joints in the upper part of Kilauean lava lakes, Hawaii: Geol. Soc. America Bull., v. 79, no. 9, p 1151-1165, illus., 1968.

Pečová, Jana. See *Petr, Vaclav. 272-173*

Peeva, I. See *Lilov, P. 268-028*

Pegoyev, A. N. See *Balyasnyy, N. D. 270-345*

Pellas, P. See *Lal, D. 269-093*

Pellas, P. See *Cantelaube, Y. 269-100*

268-093 **Pellicari, S. F.** Polarization-albedo relationship for selected lunar regions: Nature, v. 221, no. 5176, p. 162, illus., 1969.

271-277 **Pellinen, L. P.** Comparison of different methods for computing the plumb-line deflections in the mountainous areas: Bull. Geod., no. 89, p. 345-354, 1968.

275-238 **Pelyushchko, V. M.; Poluektov, V. F.; Grekova, G. G.** Rezul'taty izmereniy sily tyazhesti po stvolam shakht Krivorozhskogo zhelezorudnogo basseyna [Results of along-shaft measurements of gravity in mines in Krivoy Rog iron ore basin (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 28-31, illus., 1969.

266-225 **Pelyushenko, V. M.; Poluektov, V. F.; Shitov, N. A.** O glubinnom stroyenii Annovskogo rayona Krivorozhskogo zhelezorudnogo mestorozhdeniya po rezul'tatam kompleksnykh geofizicheskikh issledovaniy [On the deep structure of the Annov region of the Krivoy Rog iron ore deposit according to the results of combined geophysical investigations (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 45-59, illus., 1967.

274-223 **Pemberton, R. H.; Seigel, H. O.** Canadian geophysical technology—Applications and limitations overseas: Mining in Canada, September-August, 1968, p. 69-72, illus., 1968.

268-526 **Pemberton, Roger.** Practical geophysics—[Pt.] 1, Radiometric exploration—Modern tools in the search for uranium: Mining in Canada, May 1968, p. 34-42, illus., tables, 1968.

265-257 **Pemberton, Roger H.** Aeroelektrorazvedka (obzor) [Airborne electromagnetics in review]: Geofiz. Apparatura, no. 32, p. 5-20, illus., table, 1967.

265-147 **Pena, Olimpio D.** Seismicity of the Philippines, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 100-108, illus., 1966.

270-359 **Penttila, Esko.** On seismological investigations of crustal structure in Finland: [Finland] Geol. Tutkimuslaitos Geotek. Julkaisuja, no. 68, p. 28-35, 1965.

Penzien, Joseph. See *Dibaj, Mostafa. 272-142*

264-023 **Percious, J. K.** Geology and geochronology of the Del Bac Hills, Pima County, Arizona, *in* Southern Arizona Guidebook 3—Geol. Soc. America Cordilleran Sec., 64th Ann. Mtg., Tucson, 1968: Tucson, Ariz., Arizona Geol. Soc., p. 199-207, illus., tables, 1968.

Percious, J. K. See *Damon, P. E. 269-049*

265-689 **Perel'man, A. L.; Rabinovich, G. Ya.** Nekotoryye trebovaniya, pred''yavlyayemyye k apparature akusticheskogo karotazha tipa LAK [Some requirements demanded of LAK-type acoustic logging apparatus]: Geofiz. Apparatura, no. 32, p. 105-115, illus., 1967.

Perelman, David S. See *Parmelee, Richard A. 275-124*

268-015 **Perez Angel, Gonzalo.** Determinación de edad absoluta de algunas rocas de Antioquia por metodos radiactivos [Determination of the absolute age of some rocks of Antioquia by radioactive methods]: DYNA, no. 84, p. 27-31, table, 1967.

Perichaud, Jean-Jacques. See *Blanc, Yves. 269-019*

Perkins, R. W. See *Silker, W. B. 264-303*

Perkins, R. W. See *Nielsen, J. M. 269-063*

Perkins, W. E. See *Hargraves, R. B. 274-356*

269-227 **Perret, William R.** Shear waves from a nuclear explosion in a salt cavity: Seismol. Soc. America Bull., v. 58, no. 6, p. 2043-2051, illus., tables, 1968.

266-115 **Perri, Emilio.** Teoria e funzionamento di un nuovo tipo di accelerometro sismico massimale per forti terremoti, a pendolo rovescio cicloidale [Theory and functioning of a new type of maximum seismic accelerometer for strong earthquakes, by reverse cycloidal pendulum (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 15th Ann., Rome, 1966, Atti: Rome, Consiglio Nazionale Ricerche, p. 231-234, illus. [1967,].

Perroud, P. See *Bauer, A. 268-251*

Perunov, B. S. See *Kozlov, A. N. 270-291*

Pervushin, V. N. See *Koshevoy, V. V. 274-208*

Pesek, Jiri. See *Krs, Miroslav. 264-398*

266-537 **Peselnick, Louis; Meister, Robert.** A note on the rate of the 15-kb phase transition in limestone: Jour. 0Geophys. Research, v. 73, no. 18, p. 6117-6119, illus., 1968.

Peshkov, A. B. See *Savarenskiy, Ye. F. 267-322*

Peshkov, A. B. See *Savarenskiy, Ye. F. 274-290*

273-161 **Peshtmaldzhyan, O. V.** K voprosu modelirovaniya uzlov sopryazheniy naruzhnykh stenovykh paneley krupnopanel'nogo doma [On the problem of modeling the joint units of the exterior wall panels of a prefabricated house], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 93-98, illus., table, 1968.

272-366 **Pešina, Bohumil.** A multi-purpose astatic magnetometer [with Czech and Russian abs.]: Ceskoslovenská Akad. Věd Geofys. Sborník 1967, v. 15, p. 355-365, illus., tables, 1968.

Peter, G. See *Keller, G. H. 267-456*

Peter, G. See *Bassinger, B. G. 271-376*

269-451 **Peter, George; Lattimore, Robert.** Magnetic structure of the Juan de Fuca-Gorda ridge area: Jour. Geophys. Research, v. 74, no. 2, p. 586-593, illus., 1969.

270-139 **Péterfai, Béla.** Digitális szűres geoelektromos mélyszondázásoknál [Digita filtering in geoelectrical depth soundings (with Russian and German summ.)] Magyar Geofizika, v. 9, nos. 4-5, p. 178-181, illus., 1968.

Peterman, Z. E. See *Turek, A. 272-019*

Peterman, Z. E. See *Obradovich, J. D. 273-028*

Peterman, Zell E. See *Hansen, Wallace R. 264-004*

Peterman, Zell E. See *Hedge, Carl E. 264-005*

273-029 **Peterman, Zell E.; Hedge, Carl E.** Chronology of Precambrian events in the Front Range, Colorado, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2 p. 749-756, illus., 1968.

Peterschmitt, E. See *Mueller, St. 265-362*

Petersen, C. F. See *Ahrens, Thomas J. 274-139*

Petersen, N. See *Schmidbauer, E. 268-417*

Petersil'ye, I. A. See *Galimov, E. M. 266-418*

267-251 **Peterson, D. L.; Popenoe, Peter; Gaca, J. R.; Karig, D. E.** Gravity map of the Trinidad quadrangle, Colorado—A contribution to the Upper Mantle Project: U.S. Geol. Survey Geophys. Inv. Map GP-638, scale 1:250,000, 1968.

268-265 **Peterson, Donald L.** Bouguer gravity map of parts of Maricopa, Pima, Pinal, and Yuma Counties, Arizona: U.S. Geol. Survey Geophys. Inv. Map GP-615, scale 1:250,000, 1968.

Peterson, M. N. A. See *Winterer, E. L. 271-507*

264-588 **Petkevich, G. I.** K metodike opredeleniya skorostey uprugikh voln v razreze s pomoshch'yu akusticheskogo karotazha [On the procedure for determining elastic wave velocities in a section using acoustic logging (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 97-104, illus., 1968.

Petkov, I. See *Bonchev, E. 272-116*

266-513 **Petkov, I. N.** Opredeleniye skorosti seysmicheskikh voln po nachal'noy tochke godografa prelomlennykh (golovnykh) voln pri ploskoy granitse s prozvol'nym naklonom [Determination of the velocity of seismic waves from the initial point of the traveltime curve of refracted (head) waves in the case of a plane boundary with arbitrary dip]: Bolgar. Akad. Nauk Doklady, v. 21, no. 3, p. 229-232, illus., 1968.

272-173 **Petr, Václav; Pečová, Jana; Praus, Oldřich; Tobyašova, Marta.** Anisotropy and horizontal inhomogeneity of electrical conductivity derived from the analysis of the magnetotelluric field at Šrobárová (Czechoslovakia) [with Czech and Russian abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 433-449, illus., tables, 1968.

Petrak, John A. See *Chinnery, Michael A. 266-297*

Petreus, I. See *Pomirleanu, V. 264-281*

Petrik, D. V. See *Puzdrovskiy, Ye. P. 264-495*

Petrikova, M. N. See *Florenskiy, K. P. 267-068*

267-446 **Petrov, I. N.; Metallova, V. V.** Perekhodnaya termoostatochnaya namagnichennost' i yeye rol' pri nizkotemperaturnoy obrabotke magnetitsoderzhashchikh gornykh porod [Transitional thermoremanent magnetization and its role in low-temperature treatment of magnetite-bearing rocks]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 9, p. 71-78, illus., table, 1968.

270-390 **Petrov, L. V.; Yefstifeyev, V. I.** Ob odnoy apparaturnoy pomekha na zapisyakh seysmostantsiy [On some apparatus noise on the records of seismic stations]: Razved. Geofizika, no. 29, p. 46-49, illus., 1968.

Petrov, Ye. N. See *Shterengarts, Ye. M. 270-397*

Petrova, G. N. See *Burlatskaya, S. P. 271-357*

270-344 **Petrovič, Milan.** Prilog rešenju problema ekonomičijeg poslovanja kod prospekcije urana iz vazduha [Contribution to the solution of the problem of more economical organization of airborne uranium prospecting (with English summ.)]: Inst. Geol.-Rud. Istraživanja i Istpitivanja Nuklearnih i Drugih Mineral. Sirovina Radovi, v. 3, p. 101-110, illus., tables, 1967.

Petrukhin, V. P. See *Cherkasov, I. I. 265-099*

264-127 **Petrushevskiy, B. A.** O novykh napravleniyakh v seysmogeologii v svyazi s seysmicheskim rayonirovaniyem [On new trends in seismogeology in connection with seismic regionalization]: Moskov. Obshch. Ispytateley Prirody Byull., Otdel Geol., no. 5, p. 60-73, table, 1967.

267-128 **Petrushevskiy, B. A.** O dolzhnom meste probleme predskazaniya vremeni zemletryaseniya [On the proper place of the problem of predicting the time of an earthquake]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 107-113, 1968.

269-292 **Petrushevskiy, B. A.** On the nature of the conjugation zone between the Asiatic Continent and the Pacific Ocean, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 460-465, illus., 1968.

274-131 **Petrushevskiy, B. A.** Indo-Pamirskaya glubinnaya zona i Zapadno-Dekanskoye zemletryaseniye [The Indo-Pamir deep zone and the West Deccan earthquake]: Geotektonika, no. 2, p. 22-37, illus., 1969.

Petryayev, Ye. P. See *Starik, I. Ye. 275-354*

274-370 **Petsch, Bruno C.** Magnetometer survey, *in* Geology and ground water supplies in Sanborn County, South Dakota: South Dakota Geol. Survey Bull. 17, p. 50-53, illus., 1965.

272-212 **Pettersson, Lennart.** The Swedish first order gravity network: [Sweden] Rikets Allmanna Kartverk Medd., ser. A, no. 35, 43 p., illus., tables, 1967.

Petukhov, I. M. See *Marmorshteyn, L. M. 270-156*

Pevnev, A. K. See *Bulanzhe, Yu. D. 267-238*

Pevzner, M. A. See *Virina, Ye. I. 266-477*

275-339 **Pevzner, M. A.** Vozniknoveniye khimicheskoy namagnichennosti v lavakh andezito-bazal'tovogo sostave v laboratornykh usloviyakh [Formation of chemical magnetization in lavas of andesitic-basaltic composition in laboratory conditions]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 100-103, illus., table, 1969.

Pew, James A. See *Johnson, G. Leonard. 272-517*

Pfannenstiel, Max. See *Giermann, Gunter. 267-614*

Pflueger, J. C. See *Hileman, J. A. 274-433*

265-042 **Pflug, R.** Physikalische Altersbestimmungen aus dem Brasilianischen Schild [Physical age determinations from the Brazilian shield (with English abs.)]: Tectonophysics, v. 5, no. 5, p. 381-411, illus., table, 1968.

269-263 **Philippine Bur. Mines Petroleum Div.** Geophysical exploration in the Philippines since 1962, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 424-425, 1967.

264-389 **Phillips, J. D.; Berggren, W. A.; Bertels, A.; Wall, D.** Paleomagnetic stratigraphy and micropaleontology of three deep sea cores from the central North Atlantic Ocean: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 118-130, illus., table, 1968.

Phillips, Joseph D. See *Andel, Tjeerd H. 272-515*

Phinney, R. A. See *Gault, D. E. 268-084*

Phinney, R. A. See *Gault, D. E. 275-077*

269-293 **Phinney, Robert A.** (editor). The history of the Earth's crust, a symposium—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, 244 p., illus., tables, 1968.

269-294 **Phinney, Robert A.** Introduction, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 3-12, 1968.

271-113 **Phinney, Robert A.; Cathles, Lawrence M.** Diffraction of P by the core—A study of long-period amplitudes near the edge of the shadow: Jour. Geophys. Research, v. 74, no. 6, p. 1556-1574, illus., tables, 1969.

269-624 **Phipps, C. V. G.; Emerson, D. W.** Seismic profiling studies in the lower section of Port Jackson: Australian Jour. Sci., v. 31, no. 5, p. 190-191, illus., 1968.

Picciotto, E. See *Hanappe, F. 265-077*

Piccoli, Giuliano. See *Borsi, Sergio. 275-020*

Piché, W. T. See *Smith, W. E. T. 269-190*

268-654 **Pichugin, N. I.; Aripzhanov, A. A.** Geofizicheskiye issledovaniya pri proizvodstve opytnykh gidrogeologicheskikh rabot v skvazhinakh [Geophysical investigations during the execution of test hydrogeologic operations in wells]: Uzbek. Geol. Zhur., no. 2, p. 18-23, table, 1965.

266-096 **Pickett, G. R.** Properties of the Rocky Mountain Arsenal disposal reservoir and their relation to Derby earthquakes, *in* Geophysical and geological studies of the relationships between the Denver earthquake and the Rocky Mountain Arsenal well, Pt. A: Colorado School Mines Quart., v. 63, no. 1, p. 73-100, illus., tables, 1968.

Pickett, G. R. See *Wuenschel, P. C. 274-217*

Pickett, George R. See *Porter, Chris R. 274-488*

264-334 **Piddington, J. H.** The causes and uses of geomagnetic disturbance index Kp: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 39-52, illus., 1968.

272-336 **Piddington, J. H.** The growth and decay of the geomagnetic tail, *in* Earth's particles and fields—NATO Advanced Study Institute, Freising, Germany, 1967, Proc.: New York and Amsterdam, Reinhold Book Corp., p. 417-427, illus., 1968.

Pied, Bernard. See *Bardon, Charles. 274-490*

Pieri, L. See *Caputo, Michele. 274-264*

Pierson, Willard J. See *Greenwood, J. Arthur. 273-169*

Pierson, Willard J. See *Greenwood, J. Arthur. 273-170*

Pietig, F. See *Scharpenseel, H. W. 271-003*

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Pike, D. R. See *Hugo, P. J. 267-567*

Pilkey, Orrin H. See *Newton, John G. 275-406*

274-135 **Pil'nik, G. P.** Perevod na novuyu sistemu fundamental'nykh postoyannykh koefitsiyentov teorii prilivnoy neravnomernosti vrashcheniya Zemli Ye. Vularda [Conversion into the new system of the fundamental constants of the coefficients of E. Woolard's theory of tidal irregularities in the Earth's rotation (with English summ.)]: Astron. Zhur., v. 45, no. 6, p. 1326-1329, table, 1968.

200-016 **Pilot, Joachim; Rosler, H. J.** Isotopenparagenese als Hilfsmittel geologisch-geochemischer Aussagen [Isotope paragenesis as an aid to geological-geochemical statements]: Freiberger Forschungshefte, C 231, p. 267-275, illus., tables, 1968.

Pilot, Joachim. See *Rosler, J. H. 271-031*

Pilot, Joachim. See *Rosler, Hans J. 273-327*

Pingree, R. D. See *Dyer, K. R. 272-495*

269-384 **Pinneker, Ye. V.; Soyfer, V. N.; Brezgunov, V. S.; Vlasova, L. S.** Ob izotopnom sostave vodoroda rassolov yuga Sibirskoy platformy [On the isotopic composition of hydrogen in brines from the southern part of the Siberian platform]: Akad. Nauk SSSR Doklady, v. 179, no. 6, p. 1452-1455, table, 1968.

Pinson, W. H., Jr. See *Hurley, P. M. 273-015*

Pinson, W. H., Jr. See *Fairbairn, H. W. 273-025*

Pinter, S. See *Kruchinin, Yu. A. 274-253*

Pinter, S. See *Kruchinin, Yu. A. 274-254*

274-351 **Pinter, S.** Elektrofotometricheskiye izmereniya bystrykh variatsiy intensivnosti polyarnykh siyaniy i geomagnitnogo polya [Electrophotometric measurements of rapid variations of intensity of aurora and the geomagnetic field]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 61, p. 74-77, illus., 1967.

274-118 **Piolle, Xavier.** Le tremblement de terre d'Arette [The earthquake of Arette]: Rev. Géog. Pyrénées et Sud-Ouest, v. 39, no. 4, p. 369-396, illus., 1968.

271-231 **Piotrovskiy, M. V.** Nekotoryye zakonomernosti svodovo-glybovoy morfotektoniki [Some regularities of arch-block morphotectonics], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 62-71, 1968.

268-580 **Pipkin, Bernard W.** Analysis of wedge failures in layered rocks: Assoc. Eng. Geologists Bull., v. 5, no. 1, p. 12-17, illus., 1968.

Pirson, S. J. See *Rodriguez, A. R. 272-531*

274-478 **Pirson, Sylvain J.** Environmental logging and mapping in the search for minerals, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. I1-I47, illus., 1969.

Pisani, M. See *Gantar, C. 267-257*

Pisarenko, V. F. See *Nersesov, I. L. 271-095*

Pischel, Sigward. See *Oelsner, Christian. 270-231*

Pishchalov, S. S. See *Dobrev, T. B. 272-384*

273-391 **Piskarev, A. L.** Magnitnyye parametry metamorficheskikh porod Anabarskogo massiva i ikh svyaz' s usloviyami metamorfizma [Magnetic parameters of the metamorphic rocks of the Anabar massif and their relationship with the conditions of metamorphism], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 94-103, illus., table, 1968.

273-399 **Piskarev, A. L.** Magnitnyye anomalii i geologicheskoye kartirovaniye na Anabarskom kristallicheskom massive [Magnetic anomalies and geologic mapping on the Anabar crystalline massif], *in* Geofizicheskiye metody razvedki v Arktike (Sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 72-78, illus., 1968.

Pistoia, P. See *Ferrara, G. 267-360*

Pistor, P. See *Brockamp, B. 271-264*

268-525 **Pitkin, James A.** Airborne measurements of terrestrial radioactivity as an aid to geologic mapping: U.S. Geol. Survey Prof. Paper 516-F, p. F1-F29, illus., tables, 1968.

Pitman, W. C. See *Fox, Paul J. 275-199*

274-237 **Pitman, W. C., 3d.** Sea Floor spreading: Sci. Jour., v. 5, no. 2, p. 50-56, illus., 1969.

266-255 **Pitman, Walter C., 3d; Hayes, Dennis E.** Sea-floor spreading in the Gulf of Alaska: Jour. Geophys. Research, v. 73, no. 20, p. 6571-6580, illus., 1968.

Pivovarov, B. L. See *Kalinin, A. V. 267-630*

Pivovarov, B. L. See *Azimi, Sh. A. 275-368*

Pizzella, G. See *Egidi, A. 273-331*

270-066 **Plafker, George.** Source areas of the Shattered Peak and Pyramid Peak landslides at Sherman Glacier, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 374-382, illus., tables, 1968.

274-245 **Plafker, George; Rubin, Meyer.** Vertical tectonic displacements in south-central Alaska during and prior to the great 1964 earthquake, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 53-66, illus., table, 1967.

Plaskiy, V. A. See *Vovk, A. A. 271-119*

Platon, V. D. See *Kozulin, Yu. N. 266-217*

Platonenkov, A. G. See *Zhirov, K. K. 267-044*

Platonenkov, A. G. See *Zhirov, K. K. 272-039*

268-348 **Platonov, N. Kh.** Ksenolity kak pokazateli sostave glubinnykh sfer zemnoy kory [Xenoliths as indicators of the composition of the deep spheres of the Earth's crust], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 97-98, 1968.

Plaumann, S. See *Closs, H. 265-318*

Plaumann, Siegfried. See *Closs, Hans. 273-296*

265-283 **Pleshivtsev, G. A.** Poluavtomaticheskiy sposob privyaski aerogeofizicheskikh anomaliy vympelami [Semi-automatic way of marking aerogeophysical anomalies by means of dropped streamers]: Geofiz. Apparatura, no. 27, p. 146-148, illus., 1966.

271-505 **Pleshivtsev, G. A.** Elektricheskiy manipulyator dlya kontrolya stabil'nosti usileniya aerogamma-spektrometrov [Electrical manipulator for controlling the stability of the amplifier in aerogamma spectrometers]: Geofiz. Apparatura, no. 31, p. 188-191, illus., table, 1967.

Plessard, Claude. See *Nougier, Jacques. 269-442*

Plokhikh, O. I. See *Ishutin, V. V. 270-384*

Plotnikov, R. I. See *Ab, E. A. 272-553*

270-047 **Plummer, William T.** Venus clouds—Test for hydrocarbons: Science, v. 163, no. 3872, p. 1191-1192, illus., 1969.

274-048 **Plummer, William T.** Infrared reflectivity of frost and the Venus clouds: Jour. Geophys. Research, v. 74, no. 13, p. 3331-3336, illus., 1969.

Plusquellec, Y. See *Babin, C. 274-456*

275-126 **Plutchok, R.; Broome, P.** Modeling of seismic signals from large underwater explosions to predict the spectra and covariance functions: Seismol. Soc. America Bull., v. 59, no. 3, p. 1137-1147, illus., tables, 1969.

267-418 **Plyasova-Bakunina, T. A.; Matveyeva, E. T.** Relationship between pulsations of the Pc1 type and magnetic storms: Geomagnetism and Aeronomy, v. 8, no. 1, p. 153-155, illus., 1968.

272-093 **Poceski, Apostol.** The ground effects of the Skopje July 26, 1963, earthquake: Seismol. Soc. America Bull., v. 59, no. 1, p. 1-22, illus., 1969.

Pochtarev, V. I. See *Kropachev, E. P. 267-419*

266-436 **Podgornyy, I. M.; Managadze, G. G.** Modelirovaniye vzaimodeystviya solnechnogo vetra s magnitnym polem Zemli [Modeling the interaction of the solar wind with the magnetic field of the Earth]: Akad. Nauk SSSR Vestnik, no. 7, p. 38-42, illus., 1968.

Podgornyy, I. M. See *Managadze, G. G. 269-413*

Podgornyy, I. M. See *Managadze, G. G. 271-346*

272-352 **Podgornyy, I. M.; Managadze, G. G.** Modelirovaniye vziamodeystviya solnechnogo vetra s magnitnym polem Zemli [Modeling the interaction of the solar wind with the Earth's magnetic field]: Akad. Nauk SSSR Vestnik, no. 7, p. 38-42, illus., 1968.

269-665 **Podio, A. L.; Gregory, A. R.; Gray, K. E.** Dynamic properties of dry and water-saturated Green Rivershale under stress: Soc. Petroleum Engineers Jour., v. 8, no. 4, p. 389-404, illus., 1968.

274-445 **Podio-L., A.; Gregory, A. R.; Gray, K. E.** Dynamic properties of dry and water-saturated Green River shale under stress: Soc. Petroleum Engineers A.I.M.E. Trans., v. 243 (pt. 2), p. 389-404, illus., reprinted 1969; originally published 1968.

Podoba, N. V. See *Nevolin, N. V. 269-271*

Podol'skiy, Yu. V. See *Dolivo-Dobrovol'skiy, A. V. 266-248*

Podoynitsyn, Ye. M. See *Termetchikov, M. K. 270-423*

266-440 **Podshibyakin, A. K.; Smirnov, R. V.; Uzhba, T. G.; Shakhova, V. I.** Priznaki svyazi mezhdu velichinoy fiziologicheskikh pokazateley sostoyaniya cheloveka i zhivotnyky i stepen'yu vozmushchennosti magnitnogo polya Zemli [Indications of a relationship between the value of physiological indices of the state of man and animals and the degree of disturbance of the magnetic field of the Earth (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 209-214, tables, 1967.

265-158 **Pod"yapol'skiy, G. S.** O sushchnosti koeffitsiyenta γ v statistike zemletryaseniy [On the nature of the coefficient γ in earthquake statistics]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 16-31, illus., 1968.

71-094 **Pod"yapol'skiy, G. S.** O svyazi volni tsunami s porozhdayushchim yeye pogrebennym istochnikom [On the relationship of a tsunami wave to the buried source generating it], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 51-62, illus., 1968.

Podzharyy, V. M. See *Mizyuk, L. Ya. 271-137*

74-205 **Podzharyy, V. M.** K opredeleniyu sostavlyayushchikh polya cherez invarianty ellipticheskoy polyarizatsii [On the determination of the components of a field via the invariants of elliptical polarization], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 111-119, illus., 1965.

Poetz, Jo Ann. See *Frey, Fred A. 266-378*

Pogosyan, G. A. See *Oganesyan, Sh. S. 264-192*

Pogrebinskiy, S. A. See *Znamenskiy, V. V. 265-650*

Pogrebinskiy, S. A. See *Znamenskiy, V. V. 271-524*

64-385 **Pogrebnoy, V. N.** Cyclic changes in S_q variations: Geomagnetism and Aeronomy, v. 8, no. 1, p. 157-158, illus., 1968.

74-343 **Pogrebnoy, V. N.** Variability of Sq variations in the solar activity cycle: Geomagnetism and Aeronomy, v. 8, no. 6, p. 906-907, illus., 1968.

Pogrebnyak, Yu. F. See *Dolgov, Yu. A. 272-064*

65-184 **Pointon, A. J.; Taylor, R. G. F.** Elastic constants of magnesia, calcia and spinel at 16 GHz and 4.2°K: Nature, v. 219, no. 5155, p. 712, table, 1968.

65-087 Pokrzywnicki, Jerzy. Wielkie meteority żelazne odkryte w Australii [Large iron meteorites discovered in Australia]: Acta. Geophys. Polonica, v. 15, no. 4, p. 391-394, illus., 1967.

65-010 **Polach, H. A.; Golson, J.; Lovering, J. F.; Stipp, J. J.** ANU radiocarbon date list II: Radiocarbon, v. 10, no. 2, p. 179-199, tables, 1968.

Polach, H. A. See *Taylor, C. B. 267-359*

Polak, B. G. See *Makarenko, F. A. 268-300*

70-414 **Polak, E. J.** The effect of geological environment on the properties of foundation rocks, *in* Australia-New Zealand Conf. on Soil Mechanics and Found. Eng., 5th, Auckland, New Zealand, 1967, Proc.: Petone, New Zealand, Sigma Press, Ltd., p. 14-18, illus., tables, 1967.

64-318 **Polański, Antoni.** Anwendungsmöglichkeiten isotopengeochemischer Untersuchungen zur Lösung geologischer Probleme [Possibilities of applying isotope geochemical investigations to the solution of geologic problems]: Deutsch. Gesell. Geol. Wiss. Ber., ser. B, v. 13, no. 2, p. 237-249, illus., 1968.

65-073 **Polevaya, N. I.** Trebovaniya k obraztsam, otbirayemym dlya opredeleniya absolyutnogo vozrasta [Requirements for samples collected for absolute age determination], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 196-207, illus., 1967.

65-074 **Polevaya, N. I.** O geologicheskoy interpretatsii dannykh radiologicheskikh metodov [Geological interpretation of the results of radiological methods], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 208-225, illus., 1967.

Polevaya, N. I. See *Arslanov, Kh. A. 267-042*

Polian, Georges. See *Cuong, Nguyen Ba. 265-595*

264-504 **Polifosov, V. M.** Opredeleniye polozheniya krutogo ustupa krovli soli KMPV v Prikaspiyskoy vpadine [Determination of the position of the steep projection of the top of the salt by the refraction correlation method in the Caspian basin]: Razved. Geofizika, no. 23, p. 28-32, illus., table, 1967.

266-059 **Polkanov, Yu. A.** O meteoritnom veshchestve iz tretichnykh otlozheniy Ukrainy [On meteoritic matter from the Tertiary formations of the Ukraine (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 227-229, 1967.

Pol'kin, Ya. I. See *Gaponenko, G. I. 273-207*

269-290 **Pollack, Henry N.** Gravitational mechanism for sea-floor spreading: Science, v. 163, no. 3863, p. 176-177, illus., 1969.

265-089 **Pollack, J. B.; Wood, A. T., Jr.** Venus—Implications from microwave spectroscopy of the atmospheric content of water vapor: Science, v. 161, no. 3846, p. 1125-1127, illus., table, 1968.

Pollack, J. B. See *Wood, A. T., Jr. 265-093*

266-060 **Pollack, James B.; Sagan, Carl.** The case for ice clouds on Venus: Jour. Geophys. Research, v. 73, no. 18, p. 5943-5949, 1968.

Pollack, James B. See *O'Leary, Brian T. 275-062*

Pollack, James B. See *Sagan, Carl. 275-063*

275-065 **Pollack, James B.** Temperature structure of nongray planetary atmospheres: Icarus, v. 10, no. 2, p. 301-313, 1969.

275-066 **Pollack, James B.** A nongray CO_2-H_2O greenhouse model of Venus: Icarus, v. 10, no. 2, p. 314-341, illus., 1969.

268-035 **Pollack, Sidney S.** Disordered pyroxene in chondrites: Geochim. et Cosmochim. Acta, v. 32, no. 11, p. 1209-1217, illus., tables, 1968.

Poloudin, G. A. See *Akhmedov, A. M. 275-444*

269-264 **Polshkov, M.** New developments in geophysical and geochemical methods of prospecting for oil and gas in the USSR, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: United Nations ECAFE Mineral Resources Devel. Series, no. 26, p. 426-431, illus., 1967.

264-490 **Polshkov, M. K.** Perekhodnyye yavleniya v usilitele s odnom zvenom π-obraznogo fil'tra verkhnykh chastot i dvumya zven'yami π-obraznogo fil'tra nizkikh chastot [Transient phenomena in an amplifier with one π-shaped high-frequency filter unit and two π-shaped low-frequency filter units]: Prikladnaya Geofizika, no. 50, p. 91-95, illus., 1967.

264-513 **Polshkov, M. K.** K teorii perekhodnykh yavleniy v seysmicheskikh usilitelyakh s filtrami verkhnikh i nizkikh chastot [On the theory of transient phenomena in seismic amplifiers with high- and low-frequency filters]: Prikladnaya Geofizika, no. 51, p. 39-44, illus., 1968.

268-549 **Polshkov, M. K.** Perekhodnyye protsessy v seysmicheskom usilitele s dvukhzvennymi π-obraznymi fil'trami verkhnikh i nizkikh chastot [Transient processes in a seismic amplifier with two-unit pi-shaped inverse high- and low-frequency filters]: Prikladnaya Geofizika, no. 52, p. 3-7, illus., 1968.

269-648 **Polshkov, M. K.** Perekhodnyye yavleniya v seysmicheskom usilitele s dvukhzvennymi T-obraznymi fil'trami verkhnikh i nizhnikh chastot [Transient processes in a seismic amplifier with two-unit T-shaped high- and low-frequency filters]: Prikladnaya Geofizika, no. 53, p. 3-7, illus., 1968.

275-383 **Polshkov, M. K.** Osnovnyye voprosy seysmorazvedochnoy apparatury [Fundamental problems of seismic exploration apparatus]: Moscow, Vses. Nauchno-Issled. Inst. Geofiz. Metodov Razved., 335 p., 1962.

Polteva, M. N. See *Lyakhovitskiy, F. M. 268-600*

Poluektov, V. F. See *Pelyushenko, V. M. 266-225*

Poluektov, V. F. See *Pelyushchko, V. M. 275-238*

Polushanskiy, A. A. See *Belyy, G. P. 272-559*

272-550 **Polyachenko, A. L.** Teoriya perenosa teplovykh neytronov v dvukhsloynoy srede s tsilindricheskoy granitsey razdela pri impul'snom istochnike [Theory of the transfer of thermal neutrons in a two-layered medium with cylindrical boundary in the case of a pulsed source], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 74-88, illus., table, 1968.

274-495 **Polyachenko, A. L.** Prostranstvenno-vremmenoye raspredeleniye teplovykh neytronov v neodnorodnoy srede s aksial'noy simmetriyey na asimptotike po vremeni [Space-time distribution of thermal neutrons in an inhomogeneous medium with axial symmetry on the time asymptote], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 60-74, illus., 1968.

265-345 **Polyak, B. G.; Smirnov, Ya. B.** Svyaz' glubinnogo teplovogo potoka s tektonicheskim stroyeniyem kontinentov [Relationship of deep heat flow to the tectonic structure of the continents (with English summ.)]: Geotektonika, no. 4, p. 3-19, illus., tables, 1968.

Polyak, B. G. See *Makarenko, F. A. 270-234*

Polyakov, A. B. See *Yarosh, A. Ya. 269-342*

Polyakov, A. L. See *Bibikova, Ye. V. 267-045*

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Polyakova, Ye. G. See *Sokolov, V. L. 269-341*

264-437 **Pomerantsev, N. M.; Ryzhkov, V. M.; Skrotskiy, G. V.** Kvantovaya magnitometriya [Quantum magnetometry]: Geofiz. Apparatura, no. 33, p. 13-94, and no. 34, p. 8-88, illus., tables, 1967.

267-333 **Pomerantseva, I. V.** Geologicheskaya interpretatsiya glubinnykh seysmicheskikh razrezov zemnoy kory i verkhney mantii [Geologic interpretation of deep seismic sections of the crust and upper mantle], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 163-173, illus., 1968.

268-345 **Pomerantseva, I. V.** Metodika interpretatsii obmennykh prokhodyashchikh voln, registriruyemykh stantstyami "Zemlya" [A procedure for interpreting converted traveling waves recorded by "Zemlya" stations]: Prikladnaya Geofizika, no. 53, p. 37-61, illus., 1968.

Pomeroy, Paul W. See *Liebermann, Robert C. 271-114*

264-281 **Pomirleanu, V.; Petreus, I.** La géothermométrie de la fluorine basée sur l'étude des inclusions fluides de certains gisements hydrothermaux de la Roumanie [The geothermometry of fluorine based on study of fluid inclusions of certain hydrothermal deposits of Rumania]: Slovensk. Akad. Vied Geol. Sborník, v. 19, no. 1, p. 285-293, illus., tables, 1968.

264-587 **Ponomarchuk, T. F.** Interpretatsiya promyslovo-geofizicheskikh dannykh v glinistykh kollektorakh Dneprovsko-Donetskoy vpadiny [Interpretation of well logging data in the shaly reservoirs of the Dnieper-Donets basin (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 90-95, illus., 1968.

273-206 **Ponomarev, Ye. A.; Gladkov, N. A.** K metodike otsenki rudonosnosti zakrytykh territoriy Salairskogo kryazha po geologo-geofizicheskim dannym [On a procedure of estimating the ore-bearing prospects of the covered territories of the Salair Ridge according to geological and geophysical data [with English summ., p. 152)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 37-45, illus., 1968.

274-107 **Pope, Allen J.** Strain analysis of horizontal crustal movements in Alaska based on triangulation surveys before and after the Prince William Sound earthquake of March 27, 1964, *in* The Prince William Sound, Alaska, earthquake of 1964 and aftershocks, V. 3: U.S. Coast and Geod. Survey Pub. 10-3, p. 99-111, illus., tables, 1969.

Popenoe, Peter. See *Peterson, D. L. 267-251*

Popenoe, Peter. See *Behrendt, John C. 275-227*

Poplavskaya, L. N. See *Solov'yev, S. L. 265-174*

Popov, E. P. See *Artsybashev, V. A. 265-690*

267-641 **Popov, E. P.; Sinitsyn, A. Ya.** Ispol'zovaniye radiometra SRP-2K dlya neprerivnoy registratsii rezul'tatov radiometricheskogo karotazha [Use of the SRP-2K radiometer for continuous recording of the results of radioactivity logging]: Geofiz. Apparatura, no. 34, p. 168-171, illus., 1967.

Popov, E. P. See *Artsybashev, V. A. 268-640*

264-145 **Popov, I. I.** O differentisial'nom priyeme otsenki gruppovykh skorostey poverkhnostnykh seysmicheskikh voln v oblasti peresecheniya dlinnykh volnovykh trass [On a differential method of calculating surface wave group velocities in the region of intersection of long wave traces (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 44-46, illus., 1968.

Popov, I. I. See *Savarenskiy, Ye. F. 274-290*

Popov, M. S. See *Ryabinkin, L. A. 268-563*

Popov, N. V. See *Shimelevich, Yu. S. 272-561*

272-562 **Popov, N. V.; Gorbunov, V. F.** Razrabotka apparatury i metodiki kislorodnogo karotazha [Development of the apparatus and procedure of oxygen logging], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 192-197, illus., tables, 1968.

271-322 **Popov, V. I.** Yadernaya teoriya razvitiya zemnoy kory [Nuclear theory of the development of the Earth's crust]: Tashkent Univ. Osadoch. Formatsiy i Osadoch. Rud Trudy, new ser., no. 177, Geol. Nauki, v. 14, 170 p., illus., tables, 1960.

264-568 **Popov, V. K.; Nazarenko, L. I.; Omes', S. P.** Interpretatsiya tsementogramm GGK po skvazhinam Zapadnogo Predkavkaz'ya [Interpretation of cementograms of gamma-gamma logging in wells of western Ciscaucasia]: Razved. Geofizika, no. 23, p. 94-105, illus., tables, 1967.

265-157 **Popov, V. V.** O sootnosheniyakh mezhdu seysmicheskoy i teplovoy energiyami i "vysovobozhdennymi deformatsiyami" v posledovatel'nosti aftershokov [On the relationships between seismic and thermal energies and "released deformations" in aftershock sequences]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 3-15, illus., 1968.

275-450 **Popov, V. V.** Vliyaniye uglov padeniya plastov i ekstsentrichnogo polozheniya zonda v skvazhine na krivyye PS i gradiyent PS [Effect of angles of dip of formations and off-center position of the sonde in the borehole on SP curves and SP gradient (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 52-59, illus., 1969.

265-061 **Popov, Yu. N.; Denisenko, Ye. A.; Men'shikova, R. T.** Opredeleniye radiogennogo argona metodom izotopnogo razbavleniya argonom, obogashchennym Ar-36 [Determination of radiogenic argon by isotope dilution, using Ar-36 enriched tracer], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 57-63, illus., 1967.

Popov, Yu. N. See *Garris, M. A. 267-051*

275-244 **Popovich, V. S.; Krasnoshchek, A. Ya.; Rakita, M. Ya.** Ispol'zovaniye materialov gravimetrovoy s"yemki dlya strukturnykh postroyaniy v usloviyakh priosevoy chasti Prichernomorskoy vpadiny [Use of gravity survey data for structural plots in the conditions of the near-axial parts of the Black Sea basin (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 57-61, illus., table, 1969.

267-142 **Poppitz, J. V.** Velocity and displacement of explosion-induced earth tremors derived from acceleration: Seismol. Soc. America Bull., v. 58, no. 5, p. 1573-1582, illus., 1968.

265-442 **Porath, H.** The magnetic anisotropy of the Yampi Sound hematite ores: Pure and Appl. Geophysics, v. 69, p. 168-177, illus., table, 1968.

266-441 **Porath, H.** Magnetic studies on specimens of intergrown maghemite and hematite: Jour. Geophys. Research, v. 73, no. 18, p. 5959-5965, illus., table, 1968.

Porath, H. See *Chamalaun, F. H. 266-469*

270-042 **Porcello, Leonard J.; Heerema, Clarence E.; Massey, Norman G.** Optical processing of planetary radar data—Preliminary results: Jour. Geophys. Research, v. 74, no. 4, p. 1111-1115, illus., 1969.

270-360 **Porkka, M. T.** The Earth's crust: [Finland] Geol. Tutkimuslaitos Geotek. Julkaisuja, no. 68, p. 36-43, illus., 1965.

Pornyagin, Yu. I. See *Ivanova, I. A. 267-065*

Porokhova, L. N. See *Gol'tsman, F. M. 275-150*

270-134 **Porstendorfer, Evamaria.** Methodik der Auswertung elektrischer Bohrlochmessungen zur Berechnung mittleren spezifischer Langswiderstande fur die Magneto-Tellurik [Procedure of interpreting electrical borehole measurements for calculating mean specific longitudinal resistivity magnetotellurics]: Freiberger Forschungshefte, C 233, p. 43-49, illus., 1968.

Porstendorfer, Evamaria. See *Naake, Lothar. 270-135*

Porstendorfer, Evamaria. See *Naake, Lothar. 270-136*

272-233 **Porstendorfer, G.** Diskussionsbeitrag zum Vortag P. Schlosser [Discussion contribution to the address by P. Schlosser]: Freiberger Forschungshefte C 238, p. 23-24, 1968.

Porstendorfer, Gottfried. See *Naake, Lothar. 270-135*

Porstendorfer, Gottfried. See *Naake, Lothar. 270-136*

274-488 **Porter, Chris R.; Pickett, George R.; Whitman, Walter W.** A statistical method for determination of water saturation from logs, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. W1-W21, illus., tables, 1969.

272-181 **Portnyagin, M. A.** Ob anomalii elektroprovodnosti na granitse zemnaya kora-mantiya v Irkutskom amfiteatre [On anomalies of electrical conductivity at the crust-mantle boundary in the Irkutsk amphitheater]: Akad. Nauk SSSR Sibirskoye Otdeleniye, no. 12, p. 93-101, illus., 1968.

Portnyagin, Yu. I. See *Lebedinets, V. N. 269-111*

Posgay, K. See *Subbotin, S. I. 265-350*

Posgay, K. See *Subbotin, S. 267-581*

264-409 **Pospelova, G. A.; Saks, V. N.** Nekotoryye rezul'taty paleomagnitnykh issledovaniy mezozoya i kaynozoya Sibiri [Some results of paleomagnetic investigations of the Mesozoic and Cenozoic of Siberia]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 12-21, illus., 1968.

269-447 **Pospelova, G. A.; Saks, V. N.** Rezul'taty paleomagnitnykh issledovaniy mezozoya i kaynozoya Sibiri [Results of paleomagnetic investigations of the Mesozoic and Cenozoic of Siberia (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 74-79, illus., 1968.

273-197 **Pospeyev, V. I.; Mikholevskiy, V. I.** Opredeleniye koeffitsiyentov lineynogo sootvestviya a,b,c,d po sinkhronnym srednestatisticheskim ellipsam napryazhennosti polya TT [Determination of the coefficients of linear relationships a,b,c,d from synchronous mean statistical ellipses of strength of the telluric current field (with English summ., p. 156)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 104-107, illus., 1968.

275-214 **Post, Austin.** Distribution of surging glaciers in western North America [with French and German abs.]: Jour. Glaciology, v. 8, no. 53, p. 229-240, illus., table, 1969.

Postnikov, D. V. See *Garris, M. A. 267-051*

265-652 **Potapov, O. A.** Nekotoryye rezul'taty kompleksirovaniya MOV i KMPV na yuzhnom sklone vala Karpinskogo [Some results of combining reflection and refraction surveys on the south flank of the Karpinskiy arch]: Razved. Geofizika, no. 24, p. 3-12, illus., 1967.

266-536 **Potap'yev, S. V.** Stroyeniye poverkhnosti skladchatogo fundamenta tsentral'noy chasti Zapadno-Sibirskoy plity po seysmicheskim dannym [Structure of the surface of the folded basement of the central part of the West Siberian plate on the basis of seismic data], *in* Problemy izucheniya geologii dokembriya—Vses. Soveshchaniye po voprosam izucheniya i metodiki kartirovaniya dokembriyskikh obrazovaniy, Kirovsk 1964, materialy: Leningrad, Izdatel'stvo "Nauka," p. 32-48, illus., 1967.

Potts, E. L. J. See *Bhattacheryya, A. K. 270-368*

265-218 **Poulin, Ambrose O.; Harwood, T. A.** Infrared mapping of thermal anomalies in glaciers, *in* Symposium on glacier mapping, Ottawa, 1965: Canadian Jour. Earth Sci., v. 3, no. 6, p. 881-885, illus., 1966.

Poupon, A. See *Gaymard, R. 270-484*

270-476 **Powell, A. R.** Use of the Log-Test-Log technique as an aid in formation evaluation: Log Analyst, v. 9, no. 2, p. 7-13, illus., 1968.

275-006 **Powell, J. L.; Skinner, W. R.; Walker, David.** Whole-rock Rb-Sr age of metasedimentary rocks below the Stillwater Complex, Montana: Geol. Soc. America Bull., v. 80, no. 8, p. 1605-1612, illus., tables, 1969.

275-125 **Power, Dean V.** Analysis of Earth motions and seismic sources by power spectral density: Seismol. Soc. America Bull., v. 59, no. 3, p. 1071-1091, illus., tables, 1969.

Powers, Roger. See *Chard, Chester S. 268-011*

Poznanskaya, N. F. See *Shapoval, V. I. 264-408*

Poznanskaya, N. F. See *Lebedev, T. S. 266-481*

Praus, Oldrich. See *Petr, Vaclav. 272-173*

Preobrazhenskiy, V. B. See *Smirnov, V. A. 265-658*

267-349 **Presley, B. J.; Kaplan, I. R.** Changes in dissolved sulfate, calcium and carbonate from interstitial water on near-shore sediments: Geochim. et Cosmochim. Acta, v. 32, no. 10, p. 1037-1048, illus., tables, 1968.

264-285 **Press, Frank.** Earth models obtained by Monte Carlo inversion: Jour. Geophys. Research, v. 73, no. 16, p. 5223-5234, illus., table, 1968.

266-104 **Press, Frank.** A strategy for an earthquake prediction research program, *in* Earthquake prediction—Proceedings of a symposium, Zurich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 11-15, 1968.

274-284 **Press, Frank.** The suboceanic mantle: Science, v. 165, no. 3889, p. 174-176, illus., 1969.

Press, Frank. See *Latham, G. 275-054*

272-363 **Prevot, Michel.** Mise en évidence de coulées de polarité magnétique intermédiare dans un série volcanique miocène du Vivarais (Ardèche) [Report on flows with intermediate magnetic polarity in a Miocene volcanic series from the Vivarais (Ardèche)]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 1, p. 117-120, illus., table, 1969.

269-360 **Prewitt, C. T.; Sleight, A. W.** Garnet-like structures of high-pressure cadmium germanate and calcium germanate: Science, v. 163, no. 3865, p. 386-387, tables, 1969.

274-128 **Priam, M. Roland.** Seismic activity in the New Hebrides during 1963: New Hebrides Geol. Survey Ann. Rept. 1963, p. 26-37, illus., tables, 1965.

264-339 **Price, A. T.** Ionsopheric conductivity and Sq variations: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 93-102, table, 1968.

Price, A. T. See *Cocks, A. C. 272-323*

274-327 **Price, A. T.; Cocks, Alan C.** The air motions in the dynamo theory of Sq: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 131-140, illus., 1969.

273-241 **Price, N. J.** A dynamic mechanism for the development of second order faults, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 49-71, illus.; discussion, p. 72-78, 1969.

Price, P. B. See *Fleischer, R. L. 265-004*

Price, P. B. See *Fleischer, R. L. 273-005*

Price, P. B. See *Fleischer, R. L. 273-007*

Price, P. Buford. See *Fleischer, Robert L. 267-018*

266-030 **Priem, H. N. A.; Boelrijk, N. A. I. M.; Hebeda, E. H.; Verschure, R. H.; Verdurmen, E. A. Th.** Isotopic age determinations on Surinam rocks, four ages of basement rocks in north-western Surinam and of the Roraima tuff at Tafelberg: Geologie en Mijnbouw, v. 47, no. 3, p. 191-196, tables, 1968.

269-012 **Priem, H. N. A.; Mulder, F. G.; Boelrijk, N. A. I. M.; Hebeda, E. H.; Verschure, R. H.; Verdurmen, E. A. Th.** Geochronological and palaeomagnetic reconnaissance survey in parts of central and southern Sweden: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 373-380, illus., tables, 1968.

270-015 **Priem, H. N. A.; Hebeda, E. N.; Boelrijk, N. A. I. M.; Verschure, R. H.** Isotopic age determinations on Surinam rocks—[Pt.] 3, Proterozoic and Permo-Triassic basalt magmatism in the Guiana shield: Geologie en Mijnbouw, v. 47, no. 1, p. 17-20, tables, 1968.

Přihoda, K. See *Halousek, J. 272-244*

Přihoda, Karel. See *Halousek, Jan. 272-230*

272-346 **Prikner, Karel.** Pc pulsations with periods between 5 and 40 secs (Ipc) during geomagnetic storms [with Czech and Russian abs.]: Ceskoslovenská Akad. Věd Geofys. Sborník 1967, v. 15, p. 387-405, illus., table, 1968.

Prilezhayeva, N. A. See *Zagulyayeva, V. A. 264-357*

Pritula, Yu. A. See *Trofimuk, A. A. 275-170*

Privalova, L. A. See *Shlyakhtina, A. P. 264-376*

266-516 **Priyma, V. I.; Matusevich, Yu. F.; Mineyev, V. Ye.** O proslezhivanii vyklinivayushchiskhsya gorizontov metodom otrazhennykh voln [On the tracing of pinching-out horizons by the reflection method]: Razved. Geofizika, no. 25, p. 8-14, illus., 1968.

267-591 **Prokhorov, S. F.** O tochnosti opredeleniya glubin po godografam otrazhennykh voln s ispol'zovaniyem kazhusheysya skorosti [On the accuracy of determination of depths from reflection traveltime curves using apparent velocities]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 5, p. 98-101, illus., 1968.

267-593 **Prokhorov, S. F.** Ob opredelenii srednykh skorostey po godografam difragirovannykh voln [On the determination of average velocities from diffracted wave traveltime curves]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 102-105, illus., 1968.

Prokofiyeva, L. N. See *Tougarinov, A. I. 273-016*

Prokoptsev, N. G. See *Murdmaa, I. O. 274-465*

274-158 **Pros, Zdeněk; Vaněk, Jiří; Klíma, Karel; Babuška, Vladislav.** Experimentalle Untersuchung des Wellenbildes bei der Ultraschall-Durchstrahlung einer Kugel [Experimental investigation of the wave pattern in ultrasonic transmission through a sphere (with English summ. and captions)]: Zeitschr. Geophysik, v. 35, no. 2, p. 287-296, illus., 1969.

Prosen, D. See *Subbotin, S. I. 265-350*

Prosen, D. See *Subbotin, S. 267-581*

Prosen, D. I. See *Chekunov. A. V. 269-369*

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Prots', R. V. See *Gol'dgefter, V. I. 270-172*

Protsch, Reiner. See *Leakey, L. S. B. 266-002*

269-307 **Prucha, John James.** Salt deformation and decollement in the Firtree Point anticline of central New York: Tectonophysics, v. 6, no. 4, p. 273-299, illus., table, 1968.

Przyborski, W. See *Chwaszczewska, J. 269-065*

Przybyszewski, E. See *Kalinowska, Zofia. 265-421*

268-256 **Psareva, T. V.; Tsykin, Ye. N.; Tsykina, G. A.** Eksperimental'naya 150-metrovaya burovaya skvazhina na lednike Bezengi [Experimental 150-meter borehole on the Bezengi Glacier], *in* Materialy glyatsiologicheskikh issledovaniy, Khronika Obsuzhdeniya, no. 14: Moscow, Akad. Nauk SSSR Inst. Geografii, p. 93-97, illus., 1968.

267-127 **Pshennikov, K. V.; Misharina, L. A.** O vozniknovenii dvukh poverkhnosti skol'zheniya v ochage zemletryaseniya [On the generation of two slippage surfaces at an earthquake focus]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 71-78, illus., 1968.

264-088 **Pskovskiy, Yu. P.** Global'nyye issledovaniya Luny [Global investigation of the Moon]: Priroda, no. 4, p. 24-37, illus., 1968.

264-153 **Puchkov, S. V.; Garagozov, D.** Spektral'nyye seysmicheskiye kharakteristiki nekotorykh gruntov Ashkhabadskogo rayona [Spectral seismic characteristics of some grounds in the Ashkhabad region]: Akad. Nauk Turkmen. SSR Izv. Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 1, p. 86-91, illus., tables, 1968.

266-152 **Puchkov, S. V.** Kolebaniya sdviga zemlyananoy plotiny formy tela ravnogo soprotivleniya seysmicheskim vozdeystviyam [Shear vibrations of an earth dam of equal resistance to seismic action], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 96-99, illus., 1967.

274-280 **Puchkov, Ye. V.; Gulyayev, A. P.** K otsenke termolyuminestsentsii porod i mineralov [On the assessment of the thermoluminescence of rocks and minerals]: Akad. Nauk SSSR Izv. Ser. Geol., no. 5, p. 123-126, illus., table, 1969.

Pudov, V. D. See *Zdorovenin, V. V. 268-565*

267-426 **Pudovkin, I. M.; Kolesova, V. I.** Dipole model of the main geomagnetic field (based on an analysis of the Z_{ao} field): Geomagnetism and Aeronomy, v. 8, no. 2, p. 301-302, table, 1968.

267-427 **Pudovkin, I. M.; Kolesova, V. I.** Analytical modeling of the geomagnetic field: Geomagnetism and Aeronomy, v. 8, no. 2, p. 303-305, illus., 1968.

269-416 **Pudovkin, I. M.; Kolesova, V. I.; Valuyeva, G. Ye.** Spatial structure of the residual Z_{ae} field: Geomagnetism and Aeronomy, v. 8, no. 3, p. 483-486, illus., tables, 1968.

271-351 **Pudovkin, I. M.; Valuyeva, G. Ye.; Kolesova, V. I.** Dipole model of the geomagnetic field (on the basis of an analysis of the Z_{ae} field): Geomagnetism and Aeronomy, v. 8, no. 4, p. 588-591, illus., tables, 1968.

273-365 **Pudovkin, I. M.; Kolesova, V. I.; Valuyeva, G. Ye.** Representation of the geomagnetic field at the surface of the Earth and in outer space by means of dipole models: Geomagnetism and Aeronomy, v. 8, no. 5, p. 728-730, illus., table, 1968.

268-382 **Pudovkin, M. I.; Shumilov, O. I.; Zaitzeva, S. A.** Polar storms and development of the DR-currents: Planetary and Space Sci., v. 16, no. 7, p. 891-898, illus., tables, 1968.

Pudovkin, M. I. See *Belyakova, S. I. 271-347*

Pudovkin, M. I. See *Zaytseva, S. A. 273-364*

274-337 **Pudovkin, M. I.; Shumilov, O.** Contribution to the theory of polar storms: Geomagnetism and Aeronomy, v. 8, no. 6, p. 867-871, illus., 1968.

275-313 **Pudovkin, M. I.; Shumilov, O. I.** On the theory of polar substorms [with French abs.]: Annales Geophysique, v. 25, no. 1, p. 125-134, illus., 1969.

Pujos, M. See *Ballan, Y. 271-549*

Pullaiah, G. See *Verma, R. K. 273-383*

Pulpan, Hans. See *Gedney, Larry. 275-102*

268-024 **Pulvertaft, T. C. R.** The Precambrian stratigraphy of Western Greenland, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 4, Geology of the Precambrian: Prague, Academia, p. 89-107, illus., 1968.

265-020 **Punning, J. M.; Liiva, A.; Ilves, E.** Tartu radiocarbon dates III: Radiocarbon, v. 10, no. 2, p. 379-383, 1968.

Punning, J. M. See *Liiva, A. 265-029*

Puolokaynen, T. P. See *Bobrov, V. N. 264-362*

268-298 **Puranen, M.; Järvimäki; Hämäläinen, U.; Lehtinen, S.** Terrestrial heat flow in Finland: Geoexploration, v. 6, no. 3, p. 151-162, illus., table, 1968.

268-436 **Puranen, M.; Marmo, V.; Hämäläinen, U.** On the geology, aeromagnetic anomalies and susceptibilities of Precambrian rocks in the Virrat region (central Finland): Geoexploration, v. 6, no. 3, p. 163-184, illus., tables, 1968.

Puranen, Maunu. See *Ketola, Matti. 265-675*

Purcaru, G. See *Papazachos, B. 265-124*

273-024 **Purdy, J. W.; York, D.** Rb-Sr whole-rock and K-Ar mineral ages of rocks from the Superior Province near Kirkland Lake, northeastern Ontario, Canada, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 699-705, illus., tables, 1968.

265-192 **Purushotham, C. M.** Integral transform methods applied to a dynamic problem in thermo-elasticity: Pure and Appl. Geophysics, v. 69, p. 60-74, 1968.

Purzyrev, N. N. See *Brodov, L. U. 268-547*

268-245 **Pushcharovskiy, Yu. M.** Tektonicheskiye karty [Tectonic maps]: Priroda, no. 10, p. 40-45, illus., 1968.

273-272 **Pushcharovskiy, Yu. M.** Rezonansno-tektonicheskiye struktury [Resonance-tectonic structures]: Geotektonika, no. 1, p. 3-12, 1969.

Pushkov, A. N. See *Golovkov, V. P. 264-413*

Pushkov, A. N. See *Andreyev, A. I. 273-187*

Pushkov, V. V. See *Zhulin, I. A. 266-433*

Pustil'nikov, M. R. See *Lukinov, A. G. 275-380*

265-684 **Putman, J. L.** Metod i apparatura dlya obnaruzheniya nekotorykh elementov v veshchestve [Method and apparatus for detecting certain elements in a substance]: Geofiz. Apparatura, no. 27, p. 101-103, illus., 1966.

264-495 **Puzdrovskiy, Ye. P.; Petrik, D. V.; Zayakin, V. N.** O metodike seysmorazvedochnykh issledovaniya podsolevykh otlozheniy nizhney permi i karbona v Dneprovsko-Donetskoy vpadine [On a procedure of seismic exploration investigations of the subsalt formations of the Lower Permian and Carboniferous in the Dnieper-Donets basin (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 47-56, illus., 1968.

269-634 **Puzyrev, N. N.; Brodov, L. Yu.; Ginodman, A. G.; Kuznetsova, O. N.; Lebedev, K. A.; Khudobina, L. N.** Metod poperechnykh voln i yego geologicheskaya effektivnost' [The method of transverse waves and its geological effectiveness (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 174-179, illus., 1968.

272-501 **Puzyrev, N. N.; Kefeli, A. S.; Lebedev, K. A.; Lebedeva, G. N.; Sibiryakov, B. P.** Vozbuzhdeniya poperechnykh voln v skvazhinakh [Generation of transverse waves in shotholes]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 82-92, illus., 1968.

275-369 **Puzyrev, N. N.** Effektivnyye parametry godografa otrazhennykh voln konechnoy dliny dlya gorizontal'no-sloistoy sredy [Effective parameters of a reflection traveltime curve of finite length for a horizontally stratified medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 39-50, 1969.

Pyatetskiy-Shapiro, I. I. See *Arnold, E. P. 266-157*

264-434 **Pyatnitskiy, V. K.** Opyt opredeleniya glubin, razmerov i namagnichennosti istochnikov magnitnykh anomaliy [Attempt at determination of depths, dimensions, and magnetization of sources of magnetic anomalies]: Sibir. Nauchno-Issled. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 150-153, illus., 1964.

Pyatnitskiy, V. K. See *Grishin, M. P. 264-517*

Pylayeva, T. A. See *Panasenko, G. D. 267-132*

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Qamar, A. See *Bolt, Bruce. 269-199*

Quaide, W. L. See *Bunch, T. E. 273-071*

264-060 **Quaide, William L.; Oberbeck, Verne R.** Thickness determinations of the lunar surface layer from lunar impact craters: Jour. Geophys. Research, v. 73, no. 16, p. 5247-5270, illus., tables, 1968.

Quaide, William L. See *Oberbeck, Verne R. 269-124*

Quaide, William L. See *Gault, Donald E. 273-058*

274-487 **Quint, Michel; Grosmangin, Michel.** Economics of computer utilization in formation evaluation (abs.), *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans., Supp.: Houston, Tex., Soc. Prof. Well Log Analysts, p. V1-V40, illus., tables, 1969.

266-338 **Qureshy, M. N.; Brahman, N. Krishna; Aravamadhu, P. S.; Naqvi, S. M.** Role of granitic intrusions in reducing the density of the crust, and other related problems as illustrated from a gravity study of the Cuddapah Basin, India: Royal Soc. [London] Proc., sec. A, v. 304, no. 1479, p. 449-464, illus., table, 1968.

268-264 **Qureshy, M. N.; Krishna Brahman, N.; Garde, S. C.; Mathur, B. K.** Gravity anomalies and the Godavari Rift, India: Geol. Soc. America Bull., v. 79, no. 9, p. 1221-1230, illus., 1968.

275-206 **Qureshy, M. N.** Thickening of a basalt layer as a possible cause for the uplift of the Himalayas—A suggestion based on gravity data: Tectonophysics, v. 7, no. 2, p. 137-157, illus., 1969.

Rabejanahary, E. See *Megerlin, N. 273-393*

Rabinovich, G. Ya. See *Perel'man, A. L. 265-689*

Rackham, T. W. See *Andrews, A. D. 273-046*

266-270 **Radbruch, Dorothy H.** New evidence of historic fault activity in Alameda, Contra Costa, and Santa Clara Counties, California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 46-54, illus., 1968.

Radford, W. E. See *Findlay, J. A. 274-314*

265-434 **Radhakrishnamurty, C.; Likhite, S. D.; Amin, B. S.; Somayajulu, B. L. K.** Magnetic susceptibility stratigraphy in ocean sediment cores: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 464-468, illus., tables, 1968.

266-468 **Radhakrishnamurty, C.; Sahasrabudhe, P. W.; Raja, P. K. S.** On the magnetic memory phenomenon in rocks and its bearing on paleomagnetic measurements: Pure and Appl. Geophysics, v. 70, no. 2, p. 94-104, illus., 1968.

Radhakrishnamurty, I. V. See *Bhaskara Rao, V. 271-285*

271-286 **Radhakrishnamurty, I. V.** A simple method for the rapid computation of gravity and magnetic anomalies of two-dimensional bodies: Indian Geophys. Union Jour., v. 4, no. 1, p. 31-39, illus., tables, 1967.

271-384 **Radhakrishnamurty, I. V.** Note on the interpretation of magnetic anomalies of spheres: Indian Geophys. Union Jour., v. 4, no. 1, p. 41-42, 1967.

Rádler, Béla. See *Mesko, Attila. 270-382*

Radlova, L. N. See *Levin, B. Yu. 269-163*

268-136 **Radu, C.** Calibrarea aparaturii pentru mari deplasări [Calibration of apparatus of large displacement]: Acad. România Studii şi Cercetări Geologie, Geofizică, Geografie, Ser. Geofizică, v. 6, no. 1, p. 39-47, illus., tables, 1968.

268-137 **Radu, C.** Directia probabilă a zonei epicentrale Vrancea [Probable direction of the epicentral zones of Vrancea]: Acad. România Studii şi Cercetări Geologie, Geofizică, Geografie, Ser. Geofizică, v. 6, no. 1, p. 61-73, illus., tables, 1968.

272-115 **Radu, Cornelius; Tobayãs, Vladimír.** Contribution to the investigation of small intermediate-depth earthquakes in the Vrancea region: Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. 4, p. 402-406, illus., tables, 1968.

Rădulescu, S. See *Costa-Foru, Alex. 271-370*

Radzhabov, M. M. See *Vol'vovskiy, I. S. 273-465*

269-141 **Raff, R. A.; Meaburn, G. M.** Photochemical reaction mechanism for production of organic compounds in a primitive Earth atmosphere: Nature, v. 221, no. 5179, p. 459-460, table, 1969.

267-357 **Rafter, T. A.; Wilson, S. H.** The examination of sulphur isotopic ratios in the geothermal and volcanic environment, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 139-172, illus., tables [1967].

Rafter, T. A. See *Taylor, C. B. 267-359*

269-452 **Rainey, Froelich G.; Lerici, Carlo M.; Bullitt, Orville H.** (and others). The search for Sybaris, 1960-1965: Rome, Lerici Editori (Fondazione Lerici; Univ. Museum Philadelphia, Pa.), 313 p., illus., table, 1967.

Raja, P. K. S. See *Mussett, A. E. 264-400*

Raja, P. K. S. See *Radhakrishnamurty, C. 266-468*

266-038 **Raja Rao, C. S.** On the age of the Precambrian groups of Rajasthan: Jour. Mines, Metals and Fuels, v. 15, no. 10, p. 306-309, illus., 1967.

270-264 **Raja Rao, K. S.** On the Dst field in the equatorial electrojet region: Jour. Atmos. and Terrest. Physics, v. 31, no. 2, p. 299-306, illus., tables, 1969.

Rajan, R. S. See *Lal, D. 269-093*

Raju, C. V. See *Sanker Narayan, P. V. 264-423*

Rakhimov, A. R. See *Golinskiy, G. L. 265-168*

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Raleigh, C. B. See *Carter, N. L. 264-040*

264-526 **Raleigh, C. B.** Mechanisms of plastic deformation of olivine: Jour. Geophys. Research, v. 73, no. 16, p. 5391-5406, illus., 1968.

Raleigh, C. B. See *Healy, J. H. 265-101*

Raleigh, C. B. See *Lee, W. H. K. 274-111*

Raleigh, C. Barry. See *Carter, Neville L. 275-394*

266-022 **Ralph, Elizabeth K.; Han, Mark C.** Progress in thermoluminescent dating of pottery, Chap. 7.2 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 379-387, illus., table, 1968.

266-489 **Ralph, Elizabeth K.; Morrison, Frank; O'Brien, Douglas P.** Archaeological surveying utilizing a high-sensitivity difference magnetometer: Geoexploration, v. 6, no. 2, p. 109-122, illus., 1968.

269-073 **Rama.** Potassium-argon dates of some samples from Deccan Traps, *in* Internat. Geol. Cong., 22d, New Delhi, 1964, Proc., Sec. 7, Plateau basalts: Calcutta, India, Internat. Geol. Cong. Organising Comm., p. 139-140, table, 1964.

273-142 **Rama, Y. V.** Elastic behavior of some Indian rocks under confined pressure: Internat. Jour. Rock Mechanics and Mining Sci., v. 6, no. 2, p. 191-201, illus., tables, 1969.

271-271 **Ramachandra, B. L.; Lind, G.; Saxov, S.** Geophysical measurements in Jelöya: Norges Geol. Undersökelse Årbok 1966, p. 162-171, illus., tables, 1967.

269-262 **Ramakotaiah, G.; Rao, N. D. J.** Geophysical activities conducted in India by the Oil and Natural Gas Commission, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 417-423, illus., tables, 1967.

264-424 **Ramakrishnayya, R.; Atchuta Rao, D.** Magnetic investigation on a charnockite intrusion at Waltair, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 37-48, illus., table, 1966.

Ramana, Y. V. See *Balakrishna, S. 264-160*

Ramana, Y. V. See *Balakrishna, S. 265-198*

Ramana, Y. V. See *Balakrishna, S. 268-152*

Ramana, Y. V. See *Balakrishna, S. 271-117*

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Ramanujachary, K. R. See *Sanker Narayan, P. V. 274-330*

269-669 **Ramberg, H.; Ghosh, S. K.** Deformation structures in the Hovin Group schists in the Hommelvik-Hell region (Norway): Tectonophysics, v. 6, no. 4, p. 311-330, illus., tables, 1968.

272-188 **Ramberg, Hans.** Instability of layered systems in the field of gravity, [Pts.] a 1 and 2: Physics Earth and Planetary Interiors, v. 1, no. 7, p. 427-474, illus., tables, 1968.

272-210 **Ramberg, Ivar B.; Lind, Gustaf.** Gravity measurements on the Paarup Salt Dome: Dansk Geol. Foren. Medd., v. 18, pt. 2, p. 221-240, illus., 1968.

Ramji. See *Chouhan, R. K. S. 274-120*

Ramspott, L. D. See *Scholten, Robert. 274-230*

265-127 **Ranalli, G.; Scheidegger, Adrian Eugen.** Tectonic stress field in Central Europe: Annali Geofisica, v. 20, no. 2, p. 193-201, illus., tables, 1967.

274-241 **Ranalli, G.; Scheidegger, A. E.** An application of isallo stress theory to a surface fracture analysis of the Larderello area in Italy: Pure and Appl. Geophysics, v. 73, p. 134-142, illus., 1969.

264-041 **Rancitelli, Louis A.; Fisher, David E.** Potassium-argon problem in iron meteorites: Jour. Geophys. Research, v. 73, no. 16, p. 5429-5437, illus., table, 1968.

Rand, J. R. See *Hurley, P. M. 269-011*

Rand, John R. See *Hurley, Patrick M. 273-230*

266-090 **Randall, M. J.** Relative sizes of multipolar components in deep earthquakes: Jour. Geophys. Research, v. 73, no. 18, p. 6140-6142, illus., table, 1968.

Randi, P. See *Galli, M. 264-195*

Rangel Netto, José L. M. See *Tavora, Carlos J. 275-359*

Rankin, D. See *Nabetani, S. 271-122*

275-140 **Rankin, D.; Reddy, I. K.** A magnetotelluric study of resistivity anisotropy: Geophysics, v. 34, no. 3, p. 438-449, illus., 1969.

272-171 **Rankin, David; Nabetani, Sachio.** The electromagnetic impulse response of the Earth and its resistivity structure: Akita Univ. Mining Coll. Jour., Ser. A, v. 4, no. 3, p. 23-28, illus., 1968.

Rao, C. S. R. See *Hones, E. W., Jr. 268-369*

269-389 **Rao, C. S. R.** Some observations of energetic electrons in the outer radiation zone during magnetic bays: Jour. Geophys. Research, v. 74, no. 3, p. 794-801, illus., table, 1969.

Rao, M. N. See *Miller, D. K. 265-045*

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Rapaire, J. L. See *Delibrias, G. 269-059*

270-012 **Rapolla, Antonio; Vittozzi, P.** Radioactivity of Vesuvian lavas and their dating by the disequilibrium Ra-226—U-238: Bull. Volcanol., v. 32, no. 2, p. 353-364, illus., tables, 1968.

Rapolla, Antonio. See *Imbo, Giuseppe. 270-443*

266-523 **Rapoport, M. B.; Chervonskiy, M. I.; Seliverstov, B. P.; Osipenko, V. A.** Pristavka k seysmostantsii s magnitnoy zapis'yu dlya avtomaticheskoy obrabotki seysmogramm [Attachment to a seismic station with magnetic recording for automatic processing of seismograms], *in* Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 55-70, illus., table, 1967.

Rapoport, M. B. See *Chervonskiy, M. I. 266-524*

Rapoport, M. B. See *Ryabinkin, L. A. 268-563*

Rapoport, M. S. See *Bellavin, O. V. 268-272*

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273-227 **Rapp, R. H.** The geopotential to (14,14) from a combination of satellite and gravimetric data: Bull. Géod., no. 91, p. 47-80, illus., tables, 1969.

266-335 **Rapp, Richard H.** Gravitational potential of the Earth determined from a combination of satellite, observed, and model anomalies: Jour. Geophys. Research, v. 73, no. 20, p. 6555-662, illus., tables, 1968.

273-295 **Rapp, Richard H.** Statistical analysis of gravity anomalies and elevations by long profiles and by areas: Acad. Sci. Fennicae Annales, ser. A-3, no. 79, 11 p., illus., tables, 1964.

271-236 **Raskatov, G. I.** Neotektonika Karatau (Yuzhnyy Kazakhstan) [Neotectonics of the Karatau (Southern Kazakhstan)], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 103-109, illus., 1968.

Raspopov, O. M. See *Van-Chi, Fam. 264-375*

Raspopov, O. M. See *Kovtun, A. A. 265-245*

Raspopov, O. M. See *Oberc, Pavel. 265-420*

267-422 **Raspopov, O. M.** Possible excitation mechanism of type Pi2 geomagnetic field pulsations: Geomagnetism and Aeronomy, v. 8, no. 2, p. 257-260, illus., 1968.

Raspopov, O. M. See *Obertz, P. 269-411*

Raspopov, O. M. See *Kazak, B. N. 271-353*

Raspopov, O. M. See *Troitskaya, V. A. 274-338*

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Rasputin, V. A. See *Kirpishchikov, S. P. 270-530*

Rastogi, B. K. See *Gupta, Harsh. 275-090*

264-348 **Rastogi, R. G.** Luni-solar tidal oscillations in horizontal magnetic intensity H and in f_0F2 at Huancayo during low solar activity period: Jour. Atmos. and Terrest. Physics, v. 30, no. 4, p. 497-512, illus., tables, 1968.

267-408 **Rastogi, R. G.; Trivedi, N. B.** Studies of the sudden changes in H at equatorial stations in American zone [with French abs.]: Annales Géophysique, v. 24, no. 3, p. 771-777, illus., tables, 1968.

267-409 **Rastogi, R. G.** Lunar tidal oscillations in H at Huancayo during IGY/IGC [with French abs.]: Annales Géophysique, v. 24, no. 3, p. 779-788, illus., tables, 1968.

Rastogi, R. G. See *Trivedi, N. B. 272-342*

266-532 **Ratnikova, L. I.; Yanovskaya, T. B.** Priblizhennyy raschet volnovykh poley v sredakh s tonkimi sloyami [Approximate calculation of wave fields in mediums with thin layers], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 252-262, illus., 1968.

Ratnikova, L. I. See *Berzon, I. S. 274-441*

Ratnikova, L. I. See *Berzon, I. S. 274-441*

267-579 **Ratti, Giuseppe.** Contributo dei metodi geofisici allo studio dei colpi di tensione [Contributions of the geophysical method to the study of tension bursts]: Industria Mineraria, ser. 2, v. 18, no. 2, p. 68-71, 1967.

Rau, R. V. R. See *Venkata Reddy, K. 265-597*

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266-184 **Ravindra, Ravi.** Usual assumptions in the treatment of wave propagation in heterogeneous elastic media: Pure and Appl. Geophysics, v. 70, no. 2, p. 12-17, 1968.

269-060 **Ravoire, J.; Frejaville, G.; Montel, J.; Roth, E.** Nouvelle technique d'enrichissement du tritium par diffusion thermique [New technique for enriching tritium by thermal diffusion (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 639-656, illus., tables, 1967.

264-563 **Ray, Edward O.** Shale stimulation—A new approach, *in* Kentucky Oil and Gas Assoc. 30th-31st Ann. Mtgs., 1966-67, Proc. Tech. Sess.: Kentucky Geol. Survey, ser. 10, Spec. Pub. 15, p. 35-42, illus., 1968.

272-113 **Ray, S.** The recent earthquake around Bombay: Explorer [India], February-1968, p. 35-37, 1968.

Rayevskiy, Yu. G. See *Tarasov, Yu. A. 266-519*

266-525 **Raykher, L. D.; Vasil'yev, Yu. A.; Kharaz, I. I.; Gasilovskiy, K. S.; Shvartsman, Yu. P.; Chernyshev, R. G.** Seysmicheskaya apparatura dlya sposobov upravlayemogo ploskogo fronta i tsentrovykh luchey [Seismic apparatus for the controlled plane-front and centered-ray methods], *in* Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 75-84, illus., 1967.

274-473 **Raymer, L. L.; Salisch, Henry A.** The contribution of flushed zone measurements to formation evaluation, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. D1-D18, illus., tables, 1969.

Rayzman, A. P. See *Mavlyanov, T. A. 264-232*

Rayzman, A. P. See *Arslanbekov, Sh. U. 269-324*

267-074 **Rea, D. G.; Hetherington, N.; Mifflin, R.** Calculations of the effect of roughness on microwave emissivity with application to the Moon and Venus: Jour. Geophys. Research, v. 73, no. 22, p. 7009-7017, illus., 1968.

Rea, D. G. See *O'Leary, B. T. 269-121*

Rea, Donald G. See *Buhl, David. 264-061*

Rea, Donald G. See *Buhl, David. 268-042*

264-050 **Read, William F.** Jenkins—A new iron meteorite from Missouri: Meteoritics, v. 3, no. 3, p. 141-146, illus., 1967.

268-250 **Readings, C. J.; Bartlett, J. T.** Slip in single crystals of ice [with French and German abs.]: Jour. Glaciology, v. 7, no. 51, p. 479-491, illus., 1968.

275-127 **Reasenberg, Paul.** Non-linearity test of an accelerometer system designed for the seismic near-field measurement: Seismol. Soc. America Bull., v. 59, no. 3, p. 1213-1225, illus., 1969.

Reay, N. K. See *Hindle, P. H. 264-328*

Rebello, D. P. See *Banks, P. O. 272-011*

275-057 **Reber, E. E.; Stacey, J. M.** 1.4-mm and 3.4-mm observations of the lunar eclipse on 18 October 1967: Icarus, v. 10, no. 2, p. 171-178, illus., 1969.

Reddy, I. K. See *Rankin, D. 275-140*

Reddy, P. R. See *Kaila, K. L. 269-185*

268-008 **Reed, B. L.; Lanphere, M. A.** Age and chemistry of Mesozoic and Tertiary plutonic rocks in south-central Alaska: Geol. Soc. America Bull., v. 80, no. 1, p. 23-43, illus., tables, 1969.

Reed, S. J. See *Binns, R. A. 270-038*

267-436 **Rees, Anthony I.; VonRad, Ulrich; Shepard, Francis P.** Magnetic fabric of sediments from the La Jolla Submarine Canyon and Fan, California: Marine Geology, v. 6, no. 2, p. 145-178, illus., table, 1968.

Reese, E. J. See *Smith, B. A. 268-046*

269-126 **Reese, E. J.; Smith, B. A.** Evidence of vorticity in the great RedSpot of Jupiter: Icarus, v. 9, no. 3, p. 474-486, illus., 1968.

267-004 **Reesman, R. H.** The Rb-Sr analyses of some sulfide mineralization: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 23-26, illus., table, 1968.

271-324 **Reesman, R. H.** Strontium isotopic composition of gangue minerals from hydrothermal vein deposits: Econ. Geology, v. 63, no. 7, p. 731-736, tables, 1968.

264-046 **Reeves, H.; Audouze, J.** Early heat generation in meteorites: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 135-141, illus., table, 1968.

267-470 **Reford, M. S.; Sumner, J. S.** Obzor po aeromagnitorazvedke [Review of aeromagnetics]: Geofiz. Apparatura, no. 27, p. 69-81, 1966.

269-670 **Rehnman, Sven-Erik.** Bäförmåga hos slåntberg vid statisk belastning av bergspets – Resultat från modellförsök [Bearing capacity of sloping rock surface loaded by a steel dowel—Results from model tests (with English summ.)]: Statens Geotek. Inst. Särtryck och Prelim. Rap., no. 27, 74 p., illus., tables, 1968.

268-209 **Rehse, Heinz.** Die geometrische Deutung und die direkte Bestimmung der Erdplattung [The geometric interpretation and the direct determination of the Earth's flattening (with English abs.)]: Gerlands. Beitr. Geophysik, v. 77, no. 4, p. 309-313, illus., 1968.

271-283 **Reicheneder, K.** The local gravity conditions in the Geodetic Institute Potsdam [with Italian abs.]: Boll. Geofisica Teor. ed Appl., v. 10, no. 40, p. 332-340, illus., tables, 1968.

Reichl, F. E. See *Jeffries, F. 269-696*

Reichman, J. See *Halajian, J. D. 275-058*

Reid, A. F. See *Ringwood, A. E. 268-323*

Reid, A. F. See *Ringwood, A. E. 272-258*

269-119 **Reiffenstein, J. Manfred.** On the formation of the rings of Saturn: Planetary and Space Sci., v. 16, no. 12, p. 1511-1524, illus., tables, 1968.

264-399 **Reilly, T. A.** East African palaeomagnetism, *in* Report on the geology and geophysics of the east African rift system: [Nairobi], East Africa Comm. Coop. Geophysics, p. 40-43, 1965.

Reilly, T. A. See *Mussett, A. E. 264-400*

275-203 **Reinelt, E. R.** Geodynamic motion and the Coriolis force: Albertan Geographer, no. 5, p. 25-36, illus., 1969.

272-547 **Reinhardt, Hans-Gunter.** Bohrlochseismische Geschwindigkeiten im Nordteil der DDR [Borehole seismic velocities in the northern part of the German Democratic Republic]: Geophysik u. Geologie, no. 12, p. 67-82, 1968.

Reinhart, E. See *Groten, E. 267-255*

268-435 **Reis, Bernardo.** Considerações sobre a aplicação de métodos de prospecção geofísica à pesquisa de estruturas quimberlíticas, no Nordeste de Lunda (Angola)

[Concerning the application of geophysical prospecting methods in search of kimberlite structures in northeastern Lunda (Angola) (with French and English abs.)]: Angola Serviços Geologia e Minas Bol. 14, 1966, p. 49-60, illus., tables, 1968.

268-329 **Reitan, Paul H.** Frictional heat during metamorphism—[Pt.] 2, Quantitative evaluation of concentration of heat generation in space: Lithos, v. 1, no. 3, p. 268-274, illus., tables, 1968.

264-433 **Rempel', G. G.** O vvedenii popravok za rel'yef pri interpretatsii dannykh aeromagnitnoy s'yemki [Introduction of terrain corrections in the interpretation of aeromagnetic survey data]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Ayr'ya, Trudy, no. 30, p. 140-149, illus., 1964.

Renaud, A. See *Bauer, A. 268-251*

274-270 **Renner, János.** Gravity research in Hungary, 1963-66: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 1-2, p. 13-18, 1967.

Rennilson, J. J. See *Shoemaker, E. M. 268-078*

Rennilson, J. J. See *Shoemaker, E. M. 275-071*

Rennilson, J. J. See *Jaffe, L. D. 275-079*

Repechka, M. A. See *Murdmaa, I. O. 274-465*

Repina, Z. F. See *Blinov, G. I. 269-206*

269-208 **Repina, Z. F.** Voprosy seysmicheskogo mikrorayonirovaniya severnogo poberezh'ya ozera Issyk-Kul' [Problems of the seismic microzoning of the north shore of Lake Issyk-Kul], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 68-77, illus., table, 1967.

269-209 **Repina, Z. F.** O Frunzenskom zemletryasenii 14 maya 1963 g. [On the Frunze earthquake of May 14, 1963], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 78-84, illus., 1967.

264-031 **Repo, Reino; Tynni, Risto.** Zur spät- und postglazialen Entwicklung im Ostteil des ersten Salpausselkä [On the late- and postglacial development in the eastern part of the first Salpausselkä (with English abs.)]: Finlande Comm. Géol. Bull., no. 229, p. 133-159, illus., tables, 1967.

266-565 **Research Group.** (Prediction of Volcanic Eruption). Observation and discussion of the present seismic activity of Volcano Huzi [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 12, no. 3, p. 132-144, illus., tables, 1968.

266-388 **Research Group Explosion Seismology.** Crustal structure in the profile across the northeastern part of Honshu, Japan, as derived from explosion seismic observations—Pt. 1, Observations of seismic waves generated from the off Kesennuma, the off Oga Peninsula and the Tutihata explosions [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 529-605, illus., tables; Pt. 2, Crustal structure: ibid., p. 607-630, illus., table, 1968.

272-268 **Research Group Explosion Seismology.** Crustal structure in the profile across northeastern Honshu, Japan, as derived from explosion seismic observations—Pt. 1, Observations of seismic waves generated off Kesennuma, off Oga Peninsula, and the Tutihata explosions [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 4, p. 259-272, illus., tables, 1968.

Resseguier, A. de. See *Ballan, Y. 271-549*

266-447 **Retcofsky, H. L.; Friedel, R. A.** Room-temperature proton magnetic relaxation times in a bituminous coal: Fuel, v. 47, no. 5, p. 391-395, illus., 1968.

272-297 **Retzler, J.; Simpson, J. A.** Relativistic electrons confined within the neutral sheet of the geomagnetic tail: Jour. Geophys. Research, v. 74, no. 9, p. 2149-2160, illus., table, 1969.

Revenko, E. A. *See Morozov, S. G. 272-037*

269-086 **Reverdatto, V. V.** O probleme trappovykh kompleksov v svyazi s vozrastom trappov Sibirskoy platformy [On the problem of the trap complexes in relation to the age of the traps of the Siberian platform]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 4, p. 134-136, 1968.

269-352 **Reverdatto, V. V.** O znacheniyakh lokal'nykh i regional'nykh paleogeotermal'nykh gradiyentov [On the significance of local and regional paleogeothermal gradients]: Akad. Nauk SSSR Doklady, v. 179, no. 6, p. 1421-1423, 1968.

271-222 **Reverdatto, V. V.** Temperatury formirovaniya giperbazitov v svyazi s tektonicheskimi usloviyami [Temperatures of formation of ultramafic rocks in connection with tectonic conditions (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 235-236, 1968.

Revina, L. D. See *Lavrukhina, A. K. 267-066*

Rex, D. C. See *Vail, J. R. 273-013*

Rex, R. W. See *Syers, J. K. 265-369*

269-376 **Rex, R. W.; Syers, J. K.; Jackson, M. L.; Clayton, R. N.** Eolian origin of quartz in soils of Hawaiian Islands and in the Pacific pelagic sediments: Science, v. 163, no. 3864, p. 277-279, illus., tables, 1969.

275-430 **Reyment, R. A.** Statistical analysis of some volcanologic data regarded as series of point events: Pure and Appl. Geophysics, v. 74, p. 57-77, illus., tables, 1969.

274-029 **Reynolds, M. A.; Rao, M. N.; Meason, J. L.; Kuroda, P. K.** Fissiogenic and radiogenic xenon in the chondrites Beardsley and Holbrook: Jour. Geophys. Research, v. 74, no. 10, p. 2711-2716, illus., tables, 1969.

269-377 **Reynolds, P. H.; Russell, R. D.** Isotopic composition of lead from Balmat, New York: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1239-1245, illus., tables, 1968.

274-046 **Reynolds, Ray T.; Summers, Audrey L.** Calculations on the composition of the terrestrial planets: Jour. Geophys. Research, v. 74, no. 10, p. 2494-2511, illus., tables, 1969.

Réz, Ferenc. See *Folsz, Attila. 270-503*

265-613 **Rezanov, I. A.** Relation of crustal thickness to relief demonstrated by the Alpine folding ridges: Nature, v. 219, no. 5156, p. 850-851, illus., table, 1968.

267-324 **Rezanov, I. A.** Zavisimost' moshchnosti zemnoy kory ot vozrasta skladchatosti i intensivnosti noveyshikh dvizheniy [Dependence of crustal thickness on the age of folding and intensity of recent movements]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 8, p. 3-17, illus., tables, 1968.

Rezanov, I. A. See *Krasnopevtseva, G. V. 269-320*

271-229 **Rezanov, I. A.** Sravitel'naya noveyshaya tektonika gornykh oblastey [Comparative recent tectonics of mountain regions], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 46-56, illus., table, 1968.

273-323 **Rezanov, I. A.; Chamo, S. S.** O prichinakh otsutstviya "granitnogo" sloya vo vpadinakh tipa Yuzhno-Kaspiyskoy i Chernomorskoy [On the reasons for the absence of a "granitic" layer in basins of the type of the South Caspian and Black Sea]: Akad. Nauk SSSR Izv. Ser. Geol., no. 2, p. 3-11, illus., 1969.

264-574 **Rezanov, R. A.; Denisik, S. A.; Lebedev, V. Ye.** Rezul'taty matematicheskogo modelirovaniya zadachi o prostranstvenno-vremennom raspredelenii teplovykh neytronov v dvukhsloynoy srede s tsilindricheskoy granitsey razdela [Results of mathematical modeling of the problem of the space-time distribution of thermal neutrons in a two-layered medium with cylindrical boundary]: Prikladnaya Geofizika, no. 51, p. 124-144, illus., table, 1968.

Reznichenko, S. D. See *Riznichenko, T. D. 268-244*

268-244 **Reznichenko, T. D.; Reznichenko, S. D.** Some regularities in the evolution of the Earth, *in* The Earth and the Universe: Springfield, Virginia, Federal Clearinghouse Sci. and Tech. Inf., p. 138-188, illus., 1968.

267-471 **Reznik, E. Ye.** Pogreshnosti izmereniy magnitnykh pomekh na zemle [Error in measurement of magnetic noise on the ground]: Geofiz. Apparatura, no. 34, p. 93-101, illus., tables, 1967.

271-393 **Reznik, E. Ye.** K voprosu o provedenii izmereniy na astaticheskom magnitometre [On the problem of conducting measurements on an astatic magnetometer]: Geofiz. Apparatura, no. 31, p. 58-63, illus., 1967.

Rezvanov, R. A. See *Denisik, S. A. 272-552*

Rhodes, Rodney C. See *Elston, Wolfgang E. 267-252*

270-113 **Rib, Harold T.** Remote sensing applications to highway engineering, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 725-736, illus., table, 1968.

Ribbe, P. H. See *VanSchmus, W. R. 270-029*

Ribbe, P. H. See *VanSchmus, W. R. 274-036*

274-256 **Rice, Donald A.** Gravity observations in Alaska, 1964-1965, including some repeat observations, *in* The Prince William Sound, Alaska, earthquake of 1964 and aftershocks, V. 3: U.S. Coast and Geod. Survey Pub. 10-3, p. 5-20, illus., tables, 1969.

264-539 **Richards, Adrian F.** Basic literature of marine geotechnique and related fields, *in* Marine geotechnique—Internat. Research Conf., Monticello, Ill., 1966, Proc.: Urbana, Ill., Univ. Illinois Press, p. 319-323, 1967.

273-266 **Richards, Horace G.** A summary of the marine Quaternary of the Pacific coast of North and South America, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 83-90, 1967.

264-315 **Richards, J. R.** "Primary" leads: Nature, v. 219, no. 5151, p. 258-259, table, 1968.

270-013 **Richards, J. R.** Lead isotopes and geochronology in Western Tasmania: Australian Jour. Sci., v. 31, no. 4, p. 129-137, illus., 1968.

Richards, M. L. See *Francheteau, Jean. 268-423*

Richards, Michael L. See *Banks, Norman G. 271-544*

Richards, Paul G. See *Teng, La-Liang. 271-112*

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Richardson, A. See *Watkins, N. D. 267-438*

Richardson, A. See *Watkins, N. D. 269-439*

Richardson, A. M., Jr. See *Harrison, W. 264-537*

Richardson, K. A. See *King, E. A., Jr. 270-023*

273-342 **Richmond, A. D.** Relation of the westward drift of the geomagnetic field to the rotation of the Earth's core: Jour. Geophys. Research, v. 74, no. 11, p. 3013-3018, table, 1969.

274-228 **Richter, C. F.** Comments on paper by B. Isacks, J. Oliver, and L. R. Sykes, "Seismology and the new global tectonics" [1968]: Jour. Geophys. Research, v. 74, no. 10, p. 2786-2788, 1969.

Ricolvi, M. See *Leveque, P. 271-514*

274-004 **Riddell, Francis A.** Pleistocene faunal remains associated with carbonaceous material: Am. Antiquity, v. 34, no. 2, p. 177-180, illus., 1969.

Ridley, W. I. See *MacFarlane, D. J. 265-310*

Rieck, H. G., Jr. See *Silker, W. B. 264-303*

Rightmire, Craig T. See *Valastro, S., Jr. 265-021*

274-099 **Rihn, W. J.** The design of electromagnetic damping circuits: Seismol. Soc. America Bull., v. 59, no. 2, p. 967-972, illus., 1969.

265-274 **Rikhter, V. G.; Samov, V. N.** O korrelyatsionnykh svyazakh absolyutnykh glubin zaleganiya nekotorykh gorizontov zemnoy kory v Zapadnoy chasti Turanskoy plity [On correlational relationships of absolute depths of some crustal horizons in the Western part of the Tura plate]: Neftegazovaya Geologiya i Geofizika, no. 5, p. 33-36, illus., 1968.

270-386 **Rikhter, V. I.** Sposob raspoznavaniya chastichnokratnykh otrazhennykh voln [A method of recognizing partial multiple reflections]: Razved. Geofizika, no. 29, p. 24-27, illus., 1968.

264-337 **Rikitake, T.** Theoretical magnetograms for s.s.c. when the ocean effect is considered: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 79-90, illus., table, 1968.

265-357 **Rikitake, T.; Miyamura, S.; Tsubokawa, I.; Murauchi, S.; Uyeda, S.; Kuno, H.; Gorai, M.** Geophysical and geological data in and around the Japan Arc, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1101-1118, illus., 1968.

266-108 **Rikitake, T.** Geomagnetism and earthquake prediction, *in* Earthquake prediction—Proceedings of a symposium, Zurich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 59-68, illus., table, 1968.

264-175 **Rikitake, Tsuneji.** Electromagnetic induction within non-uniform plane and spherical sheets [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 1229-1294, illus., tables, 1967.

264-351 **Rikitake, Tsuneji; Hagiwara, Yukio.** Non-steady Bullard-Gellman dynamo model, [Pt.] 1: Jour. Geomagnetism and Geoelectricity, v. 20, no. 2, p. 57-65, illus., 1968.

264-352 **Rikitake, Tsuneji; Yoshino, Toshio; Sasai, Yoichi.** Geomagnetic noises and detectability of seismo-magnetic effect [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 1, p. 137-154, illus., tables, 1968.

266-214 **Rikitake, Tsuneji.** Electromagnetic induction in uniform and nonuniform sheets underlain by an undulating perfect conductor [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 361-384, illus., tables, 1968.

271-054 **Rikitake, Tsuneji.** Earthquake prediction: Earth-Sci. Rev., v. 4, no. 4, p. 245-282, illus., tables, 1968.

268-073 **Rindfleisch, T.** Getting more out of Ranger pictures by computer: Astronautics and Aeronautics, v. 7, no. 1, p. 70-74, illus., 1969.

264-533 **Rinehart, John S.** Fracture of rocks: Internat. Jour. Fracture Mechanics, v. 2, no. 3, p. 534-551, illus., tables, 1966.

268-613 **Rinehart, John S.** Geyser activity near Beowawe, Eureka County, Nevada: Jour. Geophys. Research, v. 73, no. 24, p. 7703-7706, illus., 1968.

269-178 **Rinehart, John S.; Murphy, Anabeth.** Observations on pre- and post-earthquake performance of Old Faithful Geyser: Jour. Geophys. Research, v. 74, no. 2, p. 574-575, illus., 1969.

269-686 **Rinehart, John S.** Thermal and seismic indications of Old Faithful Geyser's inner workings: Jour. Geophys. Research, v. 74, no. 2, p. 566-573, illus., 1969.

273-053 **Rinehart, John S.** Intense destructive stresses resulting from stress wave interactions, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 31-42, illus., table, 1968.

274-402 **Rinehart, John S.** Waterfall-generated Earth vibrations: Science, v. 164, no. 3887, p. 1513-1514, illus., 1969.

Ring, J. See *Hindle, P. H. 264-328*

267-461 **Ringis, J.; Webster, S. S.** Magnetometer survey at Goodrich gold-copper mine, Yeoval: New South Wales Geol. Survey Rept., no. 51, p. 7-8, illus., 1967.

268-323 **Ringwood, A. E.; Reid, A. F.** High pressure polymorphs of olivines—The K_2NiF_4 type: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 67-70, 1968.

268-325 **Ringwood, A. E.; Major, Alan.** High-pressure transformations in pyroxenes, [Pt.] 2: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 76-78, illus., 1968.

Ringwood, A. E. See *Green, Trevor H. 268-330*

Ringwood, A. E. See *Green, Trevor H. 268-331*

272-258 **Ringwood, A. E.; Reid, A. F.** High pressure transformations of spinels, [Pt.] 1: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 245-250, 1968.

272-260 **Ringwood, A. E.** Phase transformations in the mantle: Earth and Planetary Sci. Letters, v. 5, no. 6, p. 401-412, illus., table, 1969.

Risely, B. G. See *Bagot, C. H. 268-269*

270-120 **Risley, Edward.** Remote sensing activities of committees of the National Research Council, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 941-944, 1968.

Riuscetti, M. See *Bottari, A. 267-620*

Rivlin, R. S. See *Sawyers, K. N. 274-148*

266-364 **Roach, Carl H.** Influence of stress history on low-temperature thermoluminescence of halite, Chap. 12.1 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 591-619, illus., tables, 1968.

Roach, D. V. See *Manuel, O. K. 268-033*

270-458 **Roark, J. J.** A new geophysical well log conversion camera: Log Analyst, v. 7, no. 1, p. 25-26, illus., 1966.

Robbins, A. R. See *Bomford, G. 266-303*

Roberson, F. I. See *Scott, R. F. 268-080*

Roberson, F. I. See *Scott, R. F. 275-073*

Roberts, C. S. See *Lanzerotti, L. J. 265-385*

268-370 **Roberts, Charles S.; Schulz, Michael.** Bounce scattering of particles trapped in the Earth's magnetic field: Jour. Geophys. Research, v. 73, no. 23, p. 7361-7376, illus., 1968.

272-380 **Roberts, D. G.; Whitmarsh, R. B.** A bathymetric and magnetic survey of the Gulf of Tadjura, western Gulf of Aden: Earth and Planetary Sci. Letters, v. 5, no. 4, p. 253-258, illus., 1968.

275-204 **Roberts, D. G.** Structural evolution of the rift zones in the Middle East: Nature, v. 223, no. 5201, p. 55-57, illus., 1969.

268-054 **Roberts, G. L.** three-color photoelectric scanning of the Moon: Icarus, v. 9, no. 2, p. 253-280, illus., 1968.

Roberts, J. L. See *Hales, A. L. 269-189*

Roberts, P. H. See *Tough, J. G. 264-330*

264-218 **Roberts, Ralph J.** Tectonic framework of the Great Basin, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 101-119, illus., 1968.

273-059 **Roberts, Wayne A.** Shock crater ejecta characteristics, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 101-114, illus., 1968.

Robertson, D. E. See *Silker, W. B. 264-303*

269-013 **Robertson, D. K.; Cumming, G. L.** Lead- and sulfur-isotope ratios from the Great Slave Lake area, Canada: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1269-1276, illus., tables, 1968.

Robertson, P. B. See *Dence, M. R. 273-075*

273-082 **Robertson, P. B.; Dence, M. R.; Vos, M. A.** Deformation in rock-forming minerals from Canadian craters, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 433-452, illus., tables, 1968.

264-402 **Robertson, W. A.** Palaeomagnetism of some Cainozoic igneous rocks from southeast Queensland: Royal Soc. Queensland Proc. 1966, v. 78, p. 87-100, illus., tables, 1967.

Robertson, W. A. See *Irving, E. 269-428*

269-432 **Robertson, W. A.; Roy, J. L.; Park, J. K.** Magnetization of the Perry Formation of New Brunswick, and the rotation of Newfoundland: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1175-1181, illus., tables, 1968.

Robertson, W. A. See *Irving, E. 270-269*

272-358 **Robertson, W. A.; Roy, J. L.; Park, J. K.** Magnetization of the Perry Formation of New Brunswick, and the rotation of Newfoundland—Reply [to discussion by] G. W. Pearce and G. N. Freda [1969, of 1965 paper]: Canadian Jour. Earth Sci., v. 6, no. 2, p. 356, 1969.

268-174 **Robinove, Charles J.** Remote-sensing potential in basic-data acquisition [with French and Spanish abs.], *in* Water for peace—Internat. Conf., Washington, D. C., 1967—V. 4, Water supply technology: Washington, D. C., U.S. Govt. Printing Office, p. 991-1005, illus., table, 1968.

Robinson, Donald J. See *Levin, Franklyn K. 274-420*

267-578 **Robinson, Enders A.** Statistical communication and detection with special reference to digital data processing of radar and seismic signals: New York, Hafner Publishing Co., 362 p., illus., tables, 1967.

271-183 **Robinson, G. D.; Klepper, M. R.; Obradovich, J. D.** Overlapping plutonism, volcanism, and tectonism in the Boulder batholith region, western Montana, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, p. 557-576, illus., table, 1968.

Robinson, J. C. See *Smith, Bradford A. 269-125*

272-071 **Robinson, J. C.** Mars—Correlation of optical and radar observations: Science, v. 164, no. 3876, p. 176-177, illus., 1969.

266-506 **Robinson, John C.** Noise attenuation on common-depth-point seismic records by a semideterministic approach: Geophysics, v. 33, no. 5, p. 723-733, illus., table, 1968.

275-357 **Robinson, John C.** HRVA—A velocity analysis technique applied to seismic data: Geophysics, v. 34, no. 3, p. 330-356, illus., 1969.

268-439 **Robinson, W. B.; Hall, J. McG.** Iron Mount mine area: South Australia Dept. Mines Mining Rev., 1966, no. 124, p. 70-77, illus., 1968.

269-232 **Rocard, Yves.** Effet séismique des tirs aériens [Seismic effect of aerial shots]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 12, p. 597-598, 1968.

269-233 **Rocard, Yves.** Calcul de l'effet séismique des tirs aériens [Calculation of the seismic effect of aerial shots]: Acad. Sci. Comptes Rendus, v. 267, no. 13, p. 623-624, 1968.

272-512 **Rocha, M.; Silverio, A.** A new method for the complete determination of the state of stress in rock masses [with French abs.]: Géotechnique, v. 19, no. 1, p. 116-132, illus., tables, 1969.

265-665 **Rocha, Manuel.** Rock mechanics in Portugal [with French and German texts], *in* Internat. Soc. Rock Mechanics Cong., 1st, Lisbon, 1966, Proc., V. 3: Lisbon, Portugal, Lab. Nac. Engenharia Civil, p. 121-141, illus., 1967.

Roche, A. See *Lauer, J. P. 265-446*

265-465 **Roche, A.** Magnetic researches on the Alsatian part of the Rhinegraben, *in* The Rhinegraben progress report 1967 [J. P. Rothe and K. Sauer, editors]: Baden-Württemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci.

Rept. 13 and Alsace-Lorraine Service Carte Géol. Mém., no. 26), p. 116-120, illus., 1967.

Roche, Alexandre. See *Serughetti, Jean. 269-441*

270-189 **Rod, Emile.** Clues to ancient Australian geosutures: Eclogae Geol. Helvetiae, v. 59, no. 2, p. 849-883, illus., 1966.

270-191 **Rod, Emile.** Continental drift with particular reference to Australia and New Zealand: APEA Jour., v. 8, pt. 2, p. 62-66, illus., 1968.

273-073 **Roddy, David J.** The Flynn Creek crater, Tennessee, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 291-322, illus., 1968.

266-182 **Rodean, Howard C.** Understanding and constructively using the effects of underground nuclear explosions: Rev. Geophysics, v. 6, no. 3, p. 401-445, illus., tables, 1968.

267-098 **Rodger, P. W.** The response of the horizontal pendulum seismometer to Rayleigh and Love waves, tilt, and free oscillations of the Earth: Seismol. Soc. America Bull., v. 58, no. 5, p. 1384-1406, illus., 1968.

267-455 **Rodionov, Ye. S.** O fizicheskikh svoystvakh gornykh porod zapadnogo kryla Magnitogorsk megasinklinoriya [On the physical properties of rocks from the west limb of the Magnitogorsk megasynclinorium], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 355-356, 1968.

265-273 **Rodnikova, R. D.; Gurevich, G. S.** Geologicheskoye stroyeniye pribrezhnoy zony Nevel'skogo rayona Yuzhnogo Sakhalina [Geology of the coastal zone of the Nevelsk region of South Sakhalin]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 14-17, illus., 1968.

275-407 **Rodolfo, Kelvin S.** Bathymetry and marine geology of the Andaman Basin, and tectonic implications for southeast Asia: Geol. Soc. America Bull., v. 80, no. 7, p. 1203-1230, illus., 1969.

272-531 **Rodriguez, A. R.; Pirson, S. J.** The continuous dipmeter as a tool for studies in directional sedimentation and directional tectonics, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. G1-G25, illus., 1968.

272-309 **Roederer, Juan G.** Quantitative models of the magnetosphere, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 77-96, 1969.

275-301 **Roederer, Juan G.; Schulz, Michael.** Effect of shell splitting on radial diffusion in the magnetosphere: Jour. Geophys. Research, v. 74, no. 16, p. 4117-4122, illus., 1969.

274-017 **Roering, C.** Non-orogenic granites and the age of the Precambrian Pongola Sequence: Witwatersrand Univ. Econ. Geology Research Unit Inf. Circ., no. 46, 20 p., illus., table, 1968.

271-511 **Roessingh, H. K.** Acoustic reflection technique uses extremely short sound pulses: Canadian Petroleum, v. 10, no. 2, p. 13-14, illus., 1969.

274-190 **Rogachev, B. V.; Sedel'nikov, E. S.; Gnidchin, V. M.** Poiski i razvedka zolotokvartsevykh zhil s pomoshch'yu izucheniya poley sverkhdlinnovolnovykh radiostantsiy [Prospecting for and exploring gold quartz veins using the fields of ultralong wave radio stations]: Razved. i Okhrana Nedr, no. 2, p. 41-43, illus., 1969.

Rogers, C. L. See *Ekren, E. B. 271-023*

Rogers, J. See *Grady, A. E. 274-243*

274-232 **Rogers, Thomas H.** Where does the Hayward fault go?: California Div. Mines and Geology Mineral Inf. Service, v. 22, no. 4, p. 54-60, illus., 1969.

Rogozhnikov, V. I. See *Rzhevskiy, V. V. 272-164*

271-388 **Rokityanskiy, I. I.** Possibilities of the method of magnetic-variation soundings: Geomagnetism and Aeronomy, v. 8, no. 4, p. 601-604, 1968.

274-188 **Rokityanskiy, I. I.; Logvinov, I. M.; Luginina, N. A.** Magnitovariatsionnoye profilirovaniya na Ukrainskom shchite [Magnetic variational profiling on the Ukrainian shield]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 100-106, illus., 1969.

264-364 **Roldugin, V. K.** Recurrence of auroral bursts: Geomagnetism and Aeronomy, v. 7, no. 6, p. 907-909, illus., 1967.

Roldugin, V. K. See *Troitskaya, V. A. 274-338*

267-196 **Roliff, W. A.** Oil and gas exploration—Anticosti Island, Quebec [with French abs.]: Geol. Assoc. Canada Proc., v. 19, p. 31-36, illus., 1968.

Roman, J. See *Chwaszczewska, J. 269-065*

267-276 **Romanenko, Yu. A.; Shemyakin, M. L.** Preobrazovaniye teoreticheskikh gravitatsionnykh i magnitnykh krivykh na EVM v posledovatel'nost' prirashcheniy dlya upravleniya shagovo-impul'snym privodom [Transformation of theoretical gravity and magnetic curves on a computer into a sequence of increments for controlling a step-pulse driving mechanism]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 6, p. 105-109, 1968.

Romanenko, Yu. A. See *Shemyakin, M. L. 270-176*

269-268 **Romanov, B. S.; Yunov, A. Yu.** Tektonika Severnogo Kaspiya po dannym morskikh geofizicheskikh issledovaniy [Tectonics of the North Caspian according to data of marine geophysical investigations (with English summ.)]: Geotektonika, no. 6, p. 70-76, illus., 1968.

270-094 **Romanov, V. G.** Ob odnoy linearizirovannoy postanovke obratnoy dinamicheskoy zadachi dlya telegrafnogo uravneniya [On a linearized formulation of the inverse dynamic problem for the telegraph equation], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 99-104, 1967.

Romanov, V. V. See *Alekseyev, F. A. 272-481*

Romanov, Yu. A. See *Mirchink, M. F. 265-468*

Romanovskiy, V. F. See *Bespalov, D. F. 272-560*

275-135 **Romig, P. R.; Major, M. W.; Wideman, C. J.; Tocher, Don.** Residual strains associated with a nuclear explosion: Mines Mag., v. 59, no. 6, p. 4-7, illus., 1969.

Romualdi, G. See *Caloi, Pietro. 273-127*

268-003 **Rona, E.; Emiliani, C.** Absolute dating of Caribbean cores P 6304-8 and P 6304-9: Science, v. 163, no. 3862, p. 66-68, illus., tables, 1969.

271-029 **Rona, E.; Brandau, B. L.** Absolute dating of ocean sediments by use of Th-230/Pa-231 ratio: Bull. Volcanol., v. 32, no. 3, p. 509-514, illus., tables, 1969.

Rona, P. A. See *Brakl, J. 264-414*

264-343 **Ronan, Colin A.** Edmond Halley and early geophysics: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 241-248, illus., 1968.

264-082 **Ronca, Luciano B.** On the distribution of large lunar craters: Icarus, v. 9, no. 1, p. 197-211, illus., 1968.

273-253 **Rondeel, H. E.** On the nucleation of kink bands, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 363-365, 1969.

269-094 **Rondot, Jehan.** Nouvel impact météoritique fossile,—La structure semi-circulaire de Charlevoix [with English abs.]: Canadian Jour. Earth Sci., v. 5, no. 5, p. 1305-1317, illus., 1968.

269-122 **Roosen, Robert G.** A photographic investigation of the gegenschein and the Earth-Moon libration point L_5: Icarus, v. 9, no. 3, p. 429-439, illus., 1968.

Roques, Maurice. See *Papon, Andre. 266-031*

Roquet, J. See *Glangeaud, F. 267-416*

272-341 **Roquet, Juliete.** Sur un cas particulier de pulsations géomagnétiques observées dans les régions équatoriales d'Afrique [On a special case of geomagnetic pulsations observed in the equatorial regions of Africa]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 7, p. 581-584, illus., table, 1969.

Roşca, V. See *Costa-Foru, Alex. 271-370*

268-263 **Rose, J. C.; Woollard, George P.; Malahoff, Alexander.** Marine gravity and magnetic studies of the Solomon Islands, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 379-410, illus., tables, 1968.

Rose, J. C. See *Woollard, G. P. 270-206*

Rose, J. C. See *Woollard, G. P. 271-270*

275-428 **Rose, William I.** Notes on fumaroles and recent activity of Volcán Pacaya, *in* Excursion guide book for Guatemala—Geol. Soc. America, 1967 Ann. Mtg.: [Guatemala] Inst. Geog. Nac. Geol. Bull. 4, p. 31-33, 1967.

Rosenberg, J. T. See *Ahrens, Thomas J. 274-139*

Rosenberg, J. Thomas. See *Ahrens, Thomas J. 273-056*

Rosenberg V., Luis A. See *Monge E., Joaquin. 268-117*

Rosenman, M. See *Ben-Menahem, Ari. 269-186*

274-277 **Rosenthal, E.; Eckstein, Y.** Temperature gradients in the subsurface of the Dead Sea area, Israel: Israel Jour. Earth-Sci., v. 17, no. 3, p. 131-136, illus., table, 1968.

269-039 **Rosholt, J. N.** Open system model for uranium—Series dating of Pleistocene samples, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 299-311, tables, 1967.

Rösler, H. J. See *Pilot, Joachim. 200-016*

273-327 **Rösler, Hans J.; Pilot, Joachim; Harzer, D.; Krüger, P.** Isotopengeochemische Untersuchungen (O, S, C) an Salinar- und Sapropelsedimenten Mitteleuropas [Isotope geochemical investigations (O, S, C) on evaporite and sapropel sediments from central Europe], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 89-100, illus., table, 1968.

271-031 **Rösler, J. H.; Pilot, Joachim.** Die zeitliche Einstufung der sachsischthuringischen Ganglagerstätten mit Hilfe der K-Ar-Methode [The temporal subdivision of the Saxon-Thüringian vein deposits with the help of the K-Ar method (with discussion)]: Freiberger Forschungshefte, C 209, p. 87-98, illus., table, 1967.

268-628 **Rösler, Rolf; Zscherpe, Gerhard.** Zur quantitativen Interpretation geophysikalischer Bohrlochmessungen im Erkundungsfeld Berzdorf [On the quantitative interpretation of geophysical well logging measurements in the Berzdorf exploratory area (with Russian and English summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 6, p. 307-312, illus., 1968.

273-508 **Rösler, Rolf.** Novyy metod interpretatsiya rezul'tatov γ-karotazha skvazhin [New method of interpresting the results of gamma logging of boreholes]: Atomnaya Energiya, v. 26, no. 4, p. 337-340, illus., 1969.

Ross, David A. See *Emery, K. O. 269-676*

271-020 **Ross, Donald C.** Descriptive petrography of three large granitic bodies in the Inyo Mountains, California: U.S. Geol. Survey Prof. Paper 601, 47 p., illus., tables, 1969.

273-232 **Ross, Donald C.** Map showing recently active breaks along the San Andreas fault between Tejon Pass and Cajon Pass, southern California: U.S. Geol. Survey Misc. Geol. Inv. Map I-553, scale 1:24,000, text, 1969.

268-338 **Rost, F.** Über die Fazieseinstufung orogenotyper Peridotite und ihre Beziehungen zur Peridotitschale des Erdmantels [On the facies intercalation of orogenotype peridotites and their relations to the peridotite shell of the mantle], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 187-196, illus., 1968.

267-421 **Rotanova, N. M.** Theory of electromagnetic induction in the case of a spherical model of the Earth: Geomagnetism and Aeronomy, v. 8, no. 2, p. 252-256, 1968.

269-414 **Rotanova, N. M.** Distribution of the electric conductivity of the Earth: Geomagnetism and Aeronomy, v. 8, no. 3, p. 435-438, 1968.

Rotenberg, A. See *Alterman, Z. S. 272-138*

Roth, E. See *Lorius, C. 264-308*

Roth, E. See *Ravoire, J. 269-060*

265-271 **Rothé, J. P.; Sauer, K.** (editors). The Rhinegraben progress report 1967: Baden-Württemberg Geol. Landesamt. Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mém., no. 26), 146 p., illus., tables, 1967.

Rothé, J.-P. See *Hiller, W. 265-130*

Rother, Gudrun. See *Kautzleben, Heinz. 274-328*

267-099 **Rothman, Robert L.** A note on the New England earthquake of November 18, 1755: Seismol. Soc. America Bull., v. 58, no. 5, p. 1501-1502, 1968.

269-395 **Rothwell, P.; Wallington, V.** The polar substorm and electron 'islands' in the Earth's magnetic tail: Planetary and Space Sci., v. 16, no. 12, p. 1441-1451, illus., tables, 1968.

272-321 **Rothwell, P.; Lynam, C.** The plasmapause, the plasma sheet, and energetic trapped electrons in the Earth's magnetosphere: Planetary and Space Sci., v. 17, no. 3, p. 447-454, illus., 1969.

271-214 **Rotman, V. K.** Andesitovyye dugi i ikh mesto v tektono-magmaticheskom razvitii severo-zapadnoy chasti Tikhogo okeana [Andesite arcs and their place in the tectonomagmatic evolution of the northwestern part of the Pacific Ocean (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 187-192, illus., 1968.

Rotshteyn, A. Ya. See *Alekseyev, G. V. 273-366*

Rotshteyn, A. Ya. See *Alekseyev, G. V. 274-381*

270-372 **Rotter, D.; Thon, H.-G.; Wordelmann, H.** Geophysikalische Untersuchungen in situ zur Abbaudynamik im Kupferschieferbergbau [Geophysical investigations in place on the mine-working dynamics in copper-schist mining]: Freiberger Forschungshefte, C 225, p. 113-121, illus., table, 1967.

273-035 **Roubault, M.; Coppens, R.; Kosztolanyi, Ch.** Determination de l'age individuel des zircons des roches granitiques par la mesure du rapport Pb-207/Pb-206—Cas des zircons du granite de Quintin (Cotes-du-Nord, France) [Individual age determinations of zircons from granitic rocks by means of the Pb-207/Pb-206 ratio—Case of zircons from the Quintin Granite, Cotes du Nord, France (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 359-370, illus., table, 1967.

274-238 **Rouse, George E.; Bisque, Ramon E.** Global tectonics and the Earth's core: Mines Mag., v. 58, no. 3, p. 28-35, illus., tables, 1968.

Rouse, George E. See *Bisque, Ramon E. 274-322*

274-168 **Rouse, John Wilson, Jr.; MacDonald, Harold C.; Waite, William P.** Geoscience applications of radar sensors: IEEE Trans. Geosci. Electronics, v. GE-7, no. 1, p. 2-19, illus., table, 1969.

274-169 **Rouse, John Wilson, Jr.; Moore, R. K.** On the feasibility of imaging radar on small spacecraft: IEEE Trans. Geosci. Electronics, v. GE-7, no. 1, p. 48-49, illus., 1969.

269-243 **Roussel, Jacques; Tournier, Daniel.** Sur la détermination de la résistivité électrique des couches profondes du sous-sol par sondage dipôle azimutal [On the determination of the electrical resistivity of deep-seated layers by azimuthal dipole sounding]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 19, p. 1045-1048, illus., 1968.

268-128 **Roustanovitch, D. N.** Essai d'étude seismique des zones epicentrales sur l'exemple du tremblement de terre d'Ashkhabad du 6 octobre 1948 [Analysis of seismic studies of the epicentral zones as exemplified by the Ashkhabad earthquake of October 6, 1948], *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 69-70, 1968.

268-132 **Roustanovitch, D. N.; Tikmakov, V. A.; Hadžievski, D.** Études séismologiques instrumentales de la zone épicentrale du séisme de Skopje du 26 juillet 1963 [Instrumental seismologic studies in the epicentral zone of the Skopje earthquake of July 26, 1963], *in* Proceedings of the International Seminar on Earthquake Engineering, Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 91-92, 1968.

270-028 **Rowe, M. W.** On the origin of excess heavy xenon in primitive chondrites: Geochim. et Cosmochim. Acta, v. 32, no. 12, p. 1317-1326, illus., tables, 1968.

265-131 **Röwer, P.; Strobach, K.** Variationen der P_n-Geschwindigkeiten von Erdbebenwellen im Gebiet des Rheingrabens [Variations of the P_n-velocities of earthquake waves in the region of the Rhine graben], *in* The Rhinegraben progress report 1967: Baden-Württemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 121-122, illus., 1967.

267-166 **Rowston, D. L.** Experimental geophysical methods in groundwater search near Esperance: Western Australia Geol. Survey Ann. Rept. 1967, p. 78-81, illus., 1968.

267-261 **Rowston, D. L.** Gravity survey of manganese deposits in the Mt. Sydney-Woodie Woodie area, Pilbara goldfield: Western Australia Geol. Survey Ann. Rept. 1964, p. 49-51, illus., 1965.

267-626 **Rowston, D. L.** Water salinities from resistivity well logs: Western Australia Geol. Survey Ann. Rept. 1967, p. 82-83, illus., 1968.

Roy, A. See *Apparao, A. 273-172*

266-206 **Roy, Amalendu.** Continuation of electromagnetic fields, [Pt.] 1: Geophysics, v. 33, no. 5, p. 834-837, 1968.

Roy, Amalendu. See *Mallick, K. 274-176*

274-177 **Roy, Amalendu.** Bedrock depth from surface potential measurements: Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 447-453, illus., table, 1968.

Roy, Amalendu. See *Dhar, R. L. 274-261*

269-420 **Roy, J. L.; Park, J. K.** Paleomagnetism of the Hopewell group, New Brunswick: Jour. Geophys. Research, v. 74, no. 2, p. 594-604, illus., tables, 1969.

Roy, J. L. See *Robertson, W. A. 269-432*

Roy, J. L. See *Robertson, W. A. 272-358*

Roy, Jean L. See *Irving, E. 265-436*

274-154 **Roy, P.** On the vibration of a visco-elastic cylindrical shell and a composite visco-elastic cylinder with an isotropic core in an axial magnetic field: Pure and Appl. Geophysics, v. 73, p. 83-89, 1969.

272-144 **Roy, Panchanan.** A note on disturbances in a visco-elastic solid subjected to a body force and a deforming magnetic field: Gerlands Beitr. Geophysik, v. 77, no. 5, p. 345-352, 1968.

264-276 **Roy, Robert F.; Decker, Edward R.; Blackwell, David D.; Birch, Francis.** Heat flow in the United States: Jour. Geophys. Research, v. 73, no. 16, p. 5207-5221, illus., tables, 1968.

267-287 **Roy, Robert F.; Blackwell, David D.; Birch, Francis.** Heat generation of plutonic rocks and continental heat flow provinces: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 1-12, illus., tables, 1968.

Roy, Robert F. See *Birch, Francis. 272-226*

Roy, Robert F. See *Brune, James N. 275-085*

Roy, Robert F. See *Warren, Robert E. 275-250*

275-400 **Royea, M. J.; Davies, K. G.** Rock mechanics applied to the extraction of pillars at the Sullivan mine: Canadian Mining and Metall. Bull., v. 61, no. 678, p. 1185-1194, illus., 1968; Canadian Inst. Mining and Metallurgy Trans. 1968, v. 71, p. 295-304, illus., 1968.

Rozanov, L. L. See *Namestnikov, Yu. G. 265-467*

270-404 **Rozanov, L. N.** O svyazi razlomov fundamenta Russkoy plity so strukturoy osadochnogo chekhla [On the relationship of basement faults of the Russian plate to the structure of the sedimentary cover (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 42-47, 1968.

Rozanov, Yu. A. See *Kantsel', A. V. 268-171*

268-591 **Rozanov, Yu. A.** Printsipy i vozmozhnosti geologicheskoy interpretatsii dannykh po issledovaniyam fiziko-mekhanicheskikh svoystv gornykh porod [Principles and possibilities of geologic interpretation of data from investigations on the physicomechanical properties of rocks], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 45-49, tables, 1968.

Roze, Ye. N. See *Das'yanenko, L. G. 264-377*

267-466 **Roze, Ye. N.; Golub, D. P.** Method of separating magnetic anomaly sources by their depth of occurrence: Geomagnetism and Aeronomy, v. 8, no. 2, p. 307-310, illus., tables, 1968.

271-352 **Roze, Ye. N.; Efendiyeva, M. A.** Some statistical characteristics of the anomalous magnetic field in the oceans: Geomagnetism and Aeronomy, v. 8, no. 4, p. 597-600, illus., 1968.

271-389 **Roze, Ye. N.** Use of statistical methods in the determination of the depth of sources of magnetic anomalies: Geomagnetism and Aeronomy, v. 8, no. 4, p. 605-608, illus., 1968.

274-339 **Roze, Ye. N.** Separation of the normal geomagnetic field by the moving average method on profiles of finite length: Geomagnetism and Aeronomy, v. 8, no. 6, p. 875-879, illus., 1968.

Rozen, O. M. See *Orlov, I. V. 269-085*

267-239 **Rozhdestvenskiy, A. P.; Zhurenko, Yu. Ye.; Trifonov, V. P.** Nekotoryye voprosy noveyshey i sovremennoy tektoniki Srednego i Yuzhnogo Urala v svyazi s izucheniyem yego glubinnogo stroyeniya [Some problems of young and recent tectonics of the Central and Southern Urals in connection with the study of their deep structure], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 324-334, illus., 1968.

269-205 **Rozova, Ye. A.** Opredeleniye glubiny zaleganiya ochagov sredneaziatskikh zemletryaseniy [Determination of depth of focuses of Central Asian earthquakes], *in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 3-17, illus., tables, 1967.

Rozs, G. See *Sebestyen, Karoly. 270-504*

Rtishcheva, V. F. See *Nevolin, N. V. 269-271*

Ruban, V. G. See *Ostistyy, B. K. 275-177*

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Rubey, William W. See *Hubbert, M. King. 273-234*

Rubin, Meyer. See *Marsters, Beverly. 271-018*

Rubin, Meyer. See *Shacklette, Hansford T. 272-005*

Rubin, Meyer. See *Plafker, George. 274-245*

265-470 **Rubinshteyn, T. A.** Trekhkomponentnyy ferrozondovyy magnitometr dlya observatorskikh nablyudeniy MFO-100-3 kanadskoy firmy E. J. Sharpe Instruments of Canada Ltd. [The MFO-100-3 three-component fluxgate magnetometer for observatory observations, of the Canadian firm , E. J. Sharpe Instruments of Canada, Ltd.]: Geofiz. Apparatura, no. 27, p. 5-7, illus., 1966.

265-471 **Rubinshteyn, T. A.** Perenosnyy ferrozondovyy magnitometr kanadskoy firmy E. J. Sharpe Instruments of Canada Ltd. [Portable fluxgate magnetometer of the Canadian firm E. J. Sharpe Instruments of Canada, Ltd.]: Geofiz. Apparatura, no. 27, p. 7-10, illus., 1966.

Rubinson, M. See *Clayton, R. N. 265-370*

Rucklidge, J. C. See *Grasty, R. L. 272-023*

270-364 **Rudajev, V.** Die Seismizität der Gebirgsschläge bei Kladno [The seismicity of rock bursts at Kladno]: Freiberger Forschungshefte, C 225, p. 7-19, illus., tables, 1967.

267-619 **Rudel, Aimé.** Les volcans d'Auvergne [The volcanoes of Auvergne (3d edition)]: Clermont-Ferrand, France, "Editions Volcans," 162 p., illus., 1966.

Rudenskaya, I. M. See *Kostyuk, O. P. 264-129*

Rudenskaya, I. M. See *Kostyuk, O. P. 265-164*

Rudnev, Yu. P. See *Arslanov, Kh. A. 267-042*

264-363 **Rudneva, N. M.** Dependence of the boundary of the magnetosphere on the non-dipole part of the geomagnetic field, according to magnetic observations of IMP-1: Geomagnetism and Aeronomy, v. 7, no. 6, p. 880-881, illus., 1967.

Rudneyev, Yu. A. See *Arslanov, Kh. A. 265-026*

Rudnitskiy, A. L. See *Krylov, S. V. 269-633*

Rudnitskiy, A. L. See *Krylov, S. V. 269-658*

271-523 **Rudnitskiy, V. P.** Vertikal'nyye godografy refragirovannykh i kratnykh refragirovannykh voln [Vertical traveltime curves of refringent and multiply refringent waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 89-93, illus., 1968.

272-551 **Rudyk, B. M.** Prostranstvennoye raspredeleniye nadteplovykh neytronov v dvukhsloynoy srede s tsilindricheskoy granitsey razdela [Spatial distribution of epithermal neutrons in a two-layered medium with cylindrical boundary], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 89-106, illus., 1968.

Ruhmkorf, H. A. See *Steinmann, W. 267-582*

269-323 **Rukhovets, N. M.** K voprosu o kharaktere glubinnykh protsessov, vyzyvayushchikh tektonicheskiye dvizheniya zemnoy kory [On the problem of the nature of the deep processes generating tectonic movements of the Earth's crust]: Geotektonika, no. 6, p. 100-104, illus., 1968.

268-061 **Rukl, Antonin.** A comparison of the American and Soviet coordinate systems for the lunar Far Side: Icarus, v. 9, no. 2, p. 395-397, illus., 1968.

265-223 **Rülke, O.** Specific resistivity of the graben fill, *in* The Rhinegraben progress report 1967: Baden-Wurttemberg Geol. Landesamt Abh., no. 6 (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 66-67, table, 1967.

272-514 **Rummel, F.** Studies of time-dependent deformation of some granite and eclogite rock samples under uniaxial, constant compressive stress and temperatures up to 400°C: Zeitschr. Geophysik, v. 35, no. 1, p. 17-42, illus., tables, 1969.

269-595 **Rummerfield, Ben F.; Olson, A. Peter; Hoover, D. B.** Seismic survey in the region of recent earthquake activity near Denver, Colorado: Geophysics, v. 33, no. 6, p. 915-925, illus., 1968.

267-336 **Rumyantseva, N. A.** O nekotorykh osobennostyakh magmatizma zapadnog sklona Urala, svyazannykh s yego glubinnym stroyeniyem [On some features of th magmatism of the west flank of the Urals, related to its deep structure], *in* Glubin noye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemno Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 288 294, illus., 1968.

264-342 **Runcorn, S. K.** Planetary magnetic fields as a test of the dynamo theory: Roya Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 183-189, illus., 1968.

266-082 **Runcorn, S. K.; Shrubsall, M. H.** The figure of the Moon: Physics Earth an Planetary Interiors, v. 1, no. 5, p. 317-325, illus., tables, 1968.

266-311 **Runcorn, S. K.** Polar wandering and continental drift [with French abs.], *in* Co tinental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reide Publishing Co., and New York, Springer-Verlag, p. 80-85, illus., 1968.

266-442 **Runcorn, S. K.** Virtual geomagnetic poles: Jour. Geophys. Research, v. 73, n 18, p. 6138, 1968.

268-399 **Runcorn, S. K.** The connexion between palaeomagnetism and palaeoclimates, *i* Problems in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castl upon Tyne, 1963, Proc.: London and New York, Interscience Publishers, p. 191-19 248-249, illus., 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, I datel'stvo "Mir," p. 95-103, illus., 1968.

268-402 **Runcorn, S. K.** Palaeowind directions and palaeomagnetic latitudes, *in* Problem in palaeoclimatology—NATO Palaeoclimates Conf., Univ. New Castle upon Tyn 1963, Proc.: London and New York, Interscience Publishers, p. 409-419, illus., tabl 1964; Russian translation *in* Problemy paleoklimatologii: Moscow, Izdatel'st "Mir," p. 244-255, illus., table, 1968.

270-087 **Runcorn, S. K.** Tidal friction and time: Science, v. 163, no. 3872, p. 1227, 1969.

274-477 **Runge, Richard J.; Worthington, A. E.; Lucas, Dennis R.** Ultra-long spaced ele tric log (ULSEL), *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 196 Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. H1-H22, illus., 1969.

264-482 **Rupnik, John J.** Structural geophysics and the Simpson in Oklahoma, *in* Sy posium on the Simpson: Tulsa Geol. Soc. Digest, v. 33, p. 35-61, illus., 1965.

Rusakov, O. M. See *Tretyak, A. N. 266-479*

Rusanov, V. D. See *Managadze, G. G. 269-413*

265-387 **Russell, Christopher T.; Olson, John V.; Holzer, Robert E.; Smith, Edward** OGO 3 search coil magnetometer data correlated with the reported crossing of t magnetopause at 6.6 R_E by ATS 1: Jour. Geophys. Research, v. 73, no. 17, p. 576 5775, illus., table, 1968.

269-387 **Russell, Christopher T.; Holzer, Robert E.** OGO 3 observations of ELF noise the magnetosphere—[Pt.] 1, Spatial extent and frequency of occurrence: Jou Geophys. Research, v. 74, no. 3, p. 755-777, illus., table, 1969.

Russell, Christopher T. See *Smith, Edward J. 273-344*

267-213 **Russell, M. J.** Structural controls of base metal mineralization in Ireland in re tion to continental drift: Inst. Mining and Metallurgy Bull., no. 741, p. B117-B128, lus., tables, 1968.

274-235 **Russell, M. J.; Burgess, A.** Tectonic comparison of North Atlantic and Mid East rifting: Nature, v. 222, no. 5198, p. 1056-1057, illus., 1969.

266-417 **Russell, R. D.; Kanasewich, E. R.; Ostic, R. G.** Quantitative interpretation of anomalous lead isotope abundances, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 680-705, illus., tables, 1967; originally published *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

267-103 **Russell, R. D.; Meldrum, R. D.; Jensen, O. G.** The Maxwell bridge as a circuit element in electromagnetic feedback seismographs: Seismol. Soc. America Bull., v. 58, no. 5, p. 1621-1630, illus., table, 1968.

Russell, R. D. See *Reynolds, P. H. 269-377*

275-297 **Russell, R. D.; Kanasewich, E. R.; Ostic, R. G.** Kolichestvannaya interpretatsiya sootnosheniya izotopov anomal'nykh svintsov [Qualitative interpretation of the isotope ratios of anomalous leads], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akadèmika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 638-660, illus., tables, 1964.

271-089 **Rustanovich, D. H.; Smirnova, M. N.** Zemletryaseniye v rayone s. Sovetskoye (b. Shatoy) (Severo-Vostochnyy Kavkaz) [Earthquakes in the vicinity of the village of Sovetskoye (Shatoi) (Northeastern Caucasus)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 20-29, illus., table, 1968.

265-162 **Rustanovich, D. N.** Seysmichnost' territorii Turkmenskoy SSR i Ashkhabadskoye zemletryaseniye 1948 g. [Seismicity of the territory of the Turkmen S.S.R. and the Ashkhabad earthquake of 1948]: Akad. Nauk SSSR Izv. Fizika Zemli, Voprosy Inzh. Seysmologii, no. 12, 95 p., illus., tables, 1967.

271-265 **Rüter, H.** Berechnung der Richtungsabhängigkeit der P-Wellen-Geschwindigkeit in polykristallinen Eisproben mit vorgegebener C-Achsen-Verteilung aus den elastischen Konstanten des Einkristalls [Calculation of the directional dependence of P-wave velocity in polycrystalline ice samples with a nonstatistical distribution of c-axes from elastic constants of ice crystals]: Polarforschung 1967, v. 6, pt. 37, nos. 1-2, p. 175-177, illus., 1968.

Ruter, H. See *Brockamp, B. 274-157*

Rutland, R. W. R. See *Hollingworth, S. E. 270-011*

273-496 **Rvachev, V. D.** O nekotorykh chertakh geomorfologii shel'fa i materikovogo sklona N'yufaundlendskogo i Labradorskogo rayonov [Some features of the geomorphology of the shelf and continental slope of the Newfoundland and Labrador areas (with English summ.)]: Okeanologiya, v. 8, no. 4, p. 659-665, illus., 1968; English translation, Oceanology, v. 8, no. 4, p. 529-534, 1969.

Ryabenko, V. A. See *Shotskiy, I. I. 271-145*

271-146 **Ryabenko, V. A.** Holovnī elementy tektonīky Ukrayins'koho shchyta [Main elements of the tectonics of the Ukrainian shield (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopoīdī, ser. B, no. 7, p. 599-603, illus., 1968.

Ryabikov, Yu. K. See *Davydov, M. S. 267-271*

268-563 **Ryabinkin, L. A.; Voskresenskiy, Yu. N.; Napalkov, Yu. V.; Popov, M. S.; Rapoport, M. B.** Pervyye rezul'taty avtomaticheskoy obrabotki materialov MRNP na ustanovke AOS-1 [First results of automatic processing of controlled-direction-pickup data on the AOS-1 setup]: Neftegazovaya Geologiya i Geofizika, no. 10, p. 30-40, illus., 1968.

265-285 **Ryabinov, M. N.** O raschete osnovnykh kharakteristik nadezhnosti mekhanicheskikh ustroystv apparatury [On the calculation of the fundamental characteristics of stability of the mechanical devices of an apparatus]: Geofiz. Apparatura, no. 32, p. 131-137, tables, 1967.

Ryabinov, M. N. See *Bachmanov, N. A. 270-145*

265-654 **Ryabov, A. V.** Seysmorazvedochnyye raboty na melkovod'ye severo-zapadnogo Kaspia [Seismic survey operations in shallow water in the northwestern Caspian]: Razved. Geofizika, no. 24, p. 16-22, illus., 1967.

271-235 **Ryabov, V. M.** O metodike vosstanovleniya strukturnykh form, deformirovannykh molodymi tektonicheskimi dvizheniyami [On the procedure for reconstructing structural forms deformed by young tectonic movements], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 96-102, illus., 1968.

Ryall, Alan. See *Boucher, Gary. 275-084*

267-085 **Ryan, J.** Cohesive properties of lunar soils as indicated by Surveyor One, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 61-76, illus., 1967.

266-061 **Ryan, J. A.; Grossman, J. J.; Hansen, W. M.** Adhesion of silicates cleaved in ultrahigh vacuum: Jour. Geophys. Research, v. 73, no. 18, p. 6061-6070, illus., table, 1968.

Ryan, M. E. See *McDowell, L. L. 275-007*

271-036 **Rybach, L.; Adams, J. A. S.** U, Th and K in rocks from the Bosumtwi Crater (Ghana) and in the Ivory Coast tektites: Bull. Volcanol., v. 32, no. 3, p. 477-479, illus., 1969.

269-408 **Rybachek, S. T.** VLF propagation in the Earth-ionosphere waveguide: Geomagnetism and Aeronomy, v. 8, no. 3, p. 393-398, illus., 1968.

Rybalka, V. M. See *Druzhinin, V. S. 267-594*

Rybalka, V. M. See *Druzhinin, V. S. 273-468*

265-138 **Rybicki, Kacper.** Dynamics of a rotational earthquake model: Acta. Geophys. Polonica, v. 15, no. 4, p. 293-304, illus., tables, 1967.

Rybin, V. K. See *Gol'dgefter, V. I. 265-259*

Rybin, V. K. See *Gol'dgefter, V. I. 270-172*

Rydell, H. S. See *Osmond, J. K. 267-340*

267-637 **Rykhlinskiy, N. I.** Raschet paletok dlya divergentnogo karotazha [Calculation of master curves for divergent logging]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 9, p. 125-129, illus., 1968.

271-105 **Rykov, A. V.** Usovershenstvovaniye seysmicheskoy apparatury dlya sluzhby preduprezhdeniya o tsunami [Improvement of seismic apparatus for the tsunami warning service], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 207-212, illus., 1968.

273-136 **Rykov, A. V.** Teoriya i priblizhennyy raschet parametricheskogo induktivnogo preobrazovatelya [Theory and approximation calculation of a parametric inductive transformer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 79-85, illus., 1969.

Rykunov, L. N. See *Zhilyayev, I. I. 273-139*

266-491 **Rymanov, V. M.** Nekotoryye dannyye o proyavlenii paleozoysko-nizhnemezozoyskogo vulkanizma na Russkoy platforme [Some data on the manifestation of Paleozoic-Early Mesozoic volcanism on the Russian platform]: Razved. Geofizika, no. 25, p. 64-73, illus., table, 1968.

271-373 **Rytzk, A. Ye.** Ustanovka dlya opredeleniya tochki Kyuri mineral'nykh zeren [Apparatus for determining the Curie point of mineral grains]: Geofiz. Apparatura, no. 31, p. 195-196, illus., 1967.

Ryzhkov, M. V. See *Amirkhanov, B. F. 271-358*

Ryzhkov, V. M. See *Pomerantsev, N. M. 264-437*

Ryzhova, T. V. See *Aleksandrov, K. S. 265-208*

268-592 **Rzhevskiy, V. V.; Novik, G. Ya.** K voprosu o vzaimoy svyazi fizicheskikh svoystv gornykh porod [On the problem of the interrelationships of the physical properties of rocks], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 54-56, illus., 1968.

272-164 **Rzhevskiy, V. V.; Rogozhnikov, V. I.; Yamshchikov, V. S.** Vliyaniye rastyagivayushchikh napryazheniy na skorosti rasprostraneniya prodol'nykh i poperechnykh uprugikh voln v gornykh porodakh [Effect of tensile stresses on the velocity of longitudinal and transverse wave propagation in rocks]: Akad. Nauk SSSR Doklady, v. 184, no. 2, p. 334-336, illus., table, 1969.

Rzhiga, O. N. See *Aleksandrov, Yu. N. 269-164*

Saari, J. M. See *Lucas, J. W. 267-079*

Saari, J. M. See *Vitkus, G. 268-081*

Saari, J. M. See *Lucas, J. W. 275-074*

Saari, J. M. See *Winter, D. F. 275-081*

270-098 **Sabins, Floyd F., Jr.** Thermal infrared imagery and its application to structural mapping in southern California: Geol. Soc. America Bull., v. 80, no. 3, p. 397-404, illus., 1969.

269-210 **Sabitova, T. M.** K voprosu ob otsenke glubiny zaleganiya ochagov zemletryaseniy po spektram poverkhnostnykh voln [On the problem of the estimation of depth of focus of earthquakes from surface wave spectrums],*in* Seysmichnost' rayonov stroitel'stva Kirgizii: Frunze, Akad. Nauk Kirgiz. SSR Inst. Geologii Otdel Seysmologii, p. 85-96, illus., tables, 1967.

270-126 **Sabry Youssef, M.; El-Hakim, H.; Awad, William K.; Shaaban, M.; Nimnim, M. E.** Geophysical investigations for ground water in Maghara area, northern Sinai: United Arab Republic Geol. Survey Paper, no. 42, 14 p., illus., 1967.

267-344 **Sackett, William M.** Carbon isotope composition of natural methane occurrences: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 5, p. 853-857, illus., tables, 1968.

Sacks, I. S. See *James, D. E. 273-117*

273-231 **Sacks, I. S.** Distribution of absorption of shear waves in South America and its tectonic significance: Carnegie Inst. Washington Year Book 67, p. 339-344, illus., 1969.

Sacks, I. S. See *James, D. E. 273-318*

Sacks, I. Selwyn. See *James, David E. 275-093*

266-250 **Sadovskiy, M. A.** Nasushchyye zadachi geofiziki v komplekse nauk o Zemle [Actual problems of geophysics in the complex of earth sciences]: Akad. Nauk SSSR Vestnik, no. 1, p. 60-63, 1968.

264-596 **Safarov, I. P.; Bortnitskaya, V. M.; Kutovaya, D. V.; Markovskiy, V. M.; Stolyar, L. N.; Aleshkina, E. S.; Dubinyuk, P. F.** Izucheniye fizicheskikh parametrov kollektorov karbonatnykh otlozheniy Volyno-Podol'skoy okrainy Russkoy platformy, vneyshney zony Predkarpatskogo progiba i Krymskogo poluostrova [Study of the physical parameters of the reservoirs of the carbonate formations of the Volyn-Podolskiy margin of the Russian platform, the outer zone of the Ciscarpathian depression, and the Crimean Peninsula]: Ukrain. Nauchno-Issled. Geol.-Razved Inst. Trudy, no. 14, p. 87-95, 1965.

273-104 **Safronov, V. S.; Zvjagina, E. V.** Relative sizes of the largest bodies during the accumulation of planets: Icarus, v. 10, no. 1, p. 109-115, illus., 1969.

274-439 **Sagalevich, A. M.; Sorokhtin, O. G.; Udintsev, G. B.; Shekhvatov, B. V** Seysmicheskoye profilirovaniye dna Chernogo morya [Seismic profiling of the Black Sea floor]: Akad. Nauk SSSR Vestnik, no. 3, p. 36-39, illus., 1969.

Sagalevich, A. M. See *Udintsev, G. B. 275-382*

Sagan, Carl. See *Pollack, James B. 266-060*

270-058 **Sagan, Carl; Morrison, David.** The planet Mercury: Sci. Jour., v. 4, no. 12, p. 72
77, illus., 1968.

Sagan, Carl. See *Campbell, Malcolm J. 273-097*

275-063 **Sagan, Carl; Pollack, James B.** On the structure of the Venus atmosphere: Icarus v. 10, no. 2, p. 274-289, illus., 1969.

275-064 **Sagan, Carl.** Gray and nongray planetary atmospheres—Structure, convective instability, and greenhouse effect: Icarus, v. 10, no. 2, p. 290-300, illus., 1969.

Saha, A. K. See *Sarkar, S. N. 272-024*

264-104 **Saha, B. P.** Intermediate layer in the crust—Seismological evidence, *in* Problem in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy an Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc Hyderabad, India, Natl. Geophys. Research Inst., p. 128-135, illus., table, 1966.

Sahasrabudhe, P. W. See *Radhakrishnamurty, C. 266-468*

264-225 **Saito, Rinji.** The regularity of the occurrence of the orogenic phases and its application: Kumamoto Jour. Sci., Ser. B, Sec. 1, v. 7, no. 2, p. 95-104, illus., tables, 1968

275-219 **Saito, Rinji.** Glacier problems of Late Precambrian Eon: Kumamoto Jour. Sci ser. B, sec. 1, v. 8, no. 1, p. 7-44, illus., tables, 1969.

275-337 **Saito, Rinji.** What is reflected in polar wandering since the Precambrian,: Kumamoto Jour. Sci., ser. B, sec. 1, v. 8, no. 1, p. 45-67, illus., tables, 1969.

275-338 **Saito, Rinji.** The meaning of the major subdivision in time scale based on pola wandering: Kumamoto Jour. Sci., ser. B, sec. 1, v. 8, no. 1, p. 69-76, illus., table 1969.

Saito, Tsunemasa. See *Hays, James D. 275-329*

269-382 **Sakai, Hitoshi.** Isotopic properties of sulfur compounds in hydrotherm processes: Geochem. Jour., v. 2, no. 1, p. 29-49, illus., tables, 1968.

Sakai, Hitoshi. See *Yamamoto, Masahiro. 275-275*

266-457 **Sakamoto, N.; Ince, P. I.; O'Reilly, W.** The effect of wet grinding on the oxidati of titanomagnetites: Royal Astron. Soc. Geophys. Jour., v. 15, no. 5, p. 509-515, illus., table, 1968.

269-040 **Sakanoue, M.; Konish, K.; Komura, K.** Stepwise determinations of thorium, protactinium and uranium isotopes and their applications in geochronological studies, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 313-329, illus., table, 1967.

269-383 **Sakanoue, Masanobu; Yoneda, Shojiro; Onishi, Koichi; Koyama, Kenju; Komura, Kazuhisa; Nakanishi, Takashi.** Alpha radioactive nuclides of uranium, protactinium and thorium in uranium deposits: Geochem. Jour., v. 2, no. 2, p. 71-86, illus., tables, 1968.

265-681 **Sakhibgareyev, R. S.; Yevko, N. D.** Mineralogicheskiye osobennosti glinistoy sostavlyayushchey produktivnykh otlozheniy Ust'-Balykskogo mestorozhdeniya nefti v svyazi s izucheniyem ikh kollektorskikh svoystv po GK [Mineralogical features of the clay component of the producing formations of the Ust-Balyk oil field in connection with the study of their reservoir properties by means of gamma logging]: Neftegazovaya Geologiya i Geofizika, no. 4, p. 11-14, illus., 1968.

Sako, Mikio. See *Kikuchi, Shigetomo. 271-560*

Saks, V. N. See *Pospelova, G. A. 264-409*

Saks, V. N. See *Pospelova, G. A. 269-447*

266-373 **Sakvarelidze, Ye. A.** O metodike issledovaniya zavisimosti teplovykh parametrov gornykh porod ot temperatury [On a procedure for investigating the dependence of the thermal parameters of rocks on temperature]: Akad. Nauk Gruzin. SSR Soobshch., v. 51, no. 1, p. 69-73, illus., 1968.

268-581 **Salamon, M. D. G.** Elastic moduli of a stratified rock mass: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 6, p. 519-527, 1968.

265-238 **Salát, Péter.** Horizontálisan rétegezett szerkezetek elméleti vertikális elektromos szondazásái gorbeinek szamitasa [Calculation of theoretical vertical electrical sounding curves for horizontally layered structures (with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 1, p. 24-29, illus., 1968.

Salat, Peter. See *Adam, Antal. 270-138*

264-097 **Salazar, Humberto.** Observaciones geológicas y daños ocasionados en Malvas y otros pueblos por el sismo del 24 de Setiembre de 1963 (Provincia de Aija, departamento de Ancash) [Geologic observations and damage caused by the earthquake of September 24, 1963, in Malvas and other villages (Province of Aija, department of Ancash)]: [Peru] Com. Carta Geol. Nac. Bol., no. 13, p. 119-131, illus., 1966.

Saldukas, I. See *Alldredge, L. R. 274-316*

267-155 **Salekhli, T. M.** Issledovaniye skorostey prodol'nykh ul'trazvukovykh voln v obraztsakh osadochnykh porod, nasyshchennykh flyuidami, pri vysokikh vsestronnikh davleniyakh [Investigations of the velocities of longitudinal ultrasonic waves in samples of sedimentary rocks saturated with fluids, at high confining pressures], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 81-82, 1967.

Salekhli, T. M. See *Volarovich, M. P. 268-159*

269-301 **Sales, John K.** Regional tectonic setting and mechanics of origin of the Black Hills uplift, *in* Black Hills area, South Dakota, Montana, Wyoming—Wyoming Geol. Assoc., 20th Field Conf., 1968, Guidebook: Casper, Wyo., Petroleum Inf., p. 10-27, illus., 1968.

Salgueiro, R. See *Casaverde, M. 273-166*

269-281 **Salikhov, A. G.** O glubinnom stroyenii i strukturnom plane kristallicheskogo fundamenta Udmurtii i prilegayushchikh territoriy [On the deep structure and structural plan of the crystalline basement of Udmurtia and adjacent territories], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 147-151, illus., 1966.

269-343 **Salikhov, A. G.** Metodika poiskov lokal'nykh kamennougol'nykh i nizhnepermskikh struktur po dannym vysokotochnoy gravirazvedki [Procedure of prospecting for local Carboniferous and lower Permian structures on the basis of data of high-precision gravity surveying], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 125-139, illus., tables, 1966.

269-344 **Salikhov, A. G.** Matematicheskoye modelirovaniya gravitatsionnogo polya razreza pri izuchenii vnutrennego stroyeniya osadochnoy tolshchi po dannym vysokotochnoy gravirazvedki [Mathematical modeling of the gravity field of a section in studying the internal structure of the sedimentary series on the basis of data of high-precision gravimetry], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 140-146, illus., tables, 1966.

271-046 **Salisbury, J. W.; Hunt, G. R.** Compositional implications of the spectral behavior of the Martian surface: Nature, v. 222, no. 5189, p. 132-136, illus., 1969.

Salisbury, J. W. See *Adler, J. E. M. 272-074*

Salisbury, John W. See *Hunt, Graham R. 266-068*

270-052 **Salisbury, John W.; Adler, Joel E. M.; Smalley, Vern G.** Dark-haloed craters on the Moon: Royal Astron. Soc. Monthly Notices, v. 138, no. 3, p. 245-249, illus., 1968.

Salisbury, John W. See *Adler, Joel E. M. 273-100*

Salisch, Henry A. See *Raymer, L. L. 274-473*

272-215 **Samama, Jean-Claude.** Exemples d'utilisation de méthodes géophysiques et géochimiques en vue de la détection des gisements stratiformes enfouis (bordure sous-cevenole ardechoise) [Examples of utilization of geophysical and geochemical methods with a view to detection of buried stratiform deposits (Ardèche sub-Cévennes border)]: Sci. Terre Mém., no. 9, 88 p., illus., tables, 1967.

274-250 **Samarskiy, R. Ya.; Stovas, M. V.; Tyapkin, K. F.** O sovremennykh gorizontal'nykh dvizheniyakh vdol' Krivoyrozhskogo glubinnogo razloma [On recent horizonta movements along the Krivoy Rog deep fracture]: Geotektonika, no. 2, p. 123-127, illus., 1969.

Samedov, S. S. See *Simkhayev, V. Z. 273-510*

268-625 **Sammel, Edward A.** Convective flow and its effect on temperature logging in small-diameter wells: Geophysics, v. 33, no. 6, p. 1004-1011, illus., 1968.

Samov, V. N. See *Rikhter, V. G. 265-274*

Samsonov, V. V. See *Bazanov, E. A. 275-171*

Sanadze, G. I. See *Aleksidze, M. A. 265-327*

Sandberg, H. J. See *Bradley, C. L. 264-250*

271-544 **Sanders, J. E.; Emery, K. O.; Uchupi, Elazar.** Microtopography of five smal areas of the continental shelf by side-scanning sonar: Geol. Soc. America Bull., v. 8 no. 4, p. 561-571, illus., 1969.

270-352 **Sanders, John E.; Clay, C. S.** Investigating the ocean bottom with side-scanning sonar, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 529-547, illus., 1968.

Sanderson, D. See *Oray, E. 264-252*

271-040 **Sandner, Werner.** Meteoritenkrater in den Polargebieten [Meteorite craters in polar regions]: Polarforschung 1967, v. 6, pt. 37, nos. 1-2, p. 178-180, table, 1968.

268-010 **Sanger, David.** Prepared core and blade traditions in the Pacific Northwest: Arctic Anthropology, v. 5, no. 1, p. 92-120, illus., tables, 1968.

268-356 **Sangster, D. F.** Relative sulphur isotope abundances of ancient seas and strata-bound sulphide deposits [with French abs.]: Geol. Assoc. Canada Proc., v. 19, p. 79-91, illus., tables, 1968.

264-423 **Sanker Narayan, P. V.; Raju, C. V.; Sarma, S. V. S.** Results of a total intensity magnetic survey in Uppal area, Hyderabad, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 23-36, illus., 1966.

271-338 **Sanker Narayan, P. V.; Srivastava, B. J.; Sarma, Y. S.** Modifications to the temperature compensation systems of the La Cour variometers at the N.G.R.I. magnetic observatory, Hyderabad: Indian Geophys. Union Jour., v. 3, no. 2, p. 51-58, illus., 1966.

274-330 **Sanker Narayan, P. V.; Ramanujachary, K. R.; Zybin, K. Yu.; Sarma, Y. S.** Establishment of a geoelectric observatory by the N.G.R.I., Hyderabad at Choutupal (Nalgonda Dt., Andhra Pradesh): [India] Natl. Geophys. Research Inst. Bull., v. 5, no. 4, p. 155-171, illus., 1967.

265-142 **Santa Cruz S., Jaime T.** Rayleigh waves dispersion characters along many paths crossing the South American continent, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 9-22, illus., tables, 1966.

264-105 **Santo, Tetsuo.** Lateral variation of Rayleigh wave dispersion character—Pt. 4, The Gulf of Mexico and Caribbean Sea [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 963-971, illus., tables, 1967.

266-122 **Santo, Tetsuo.** Reconfirmation of the existence of special dispersion regions along East Pacific Rise and some revisions on the division pattern of dispersion regions in the East and South Pacific area: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 95-105, illus., tables, 1967.

266-131 **Santo, Tetsuo.** Lateral variation of Rayleigh wave dispersion character—Pt. 5, North American continent and Arctic Ocean [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 431-456, illus., tables, 1968.

271-556 **Santos, G. P.; Wainerdi, R. E.** Neutron activation analysis of the 1965 Taal volcanic ash: Bull. Volcanol., v. 32, no. 3, p. 575-578, illus., table, 1969.

268-411 **Sanver, M.** An attempt to determine ancient field intensities using lavas containing single phase titanomagnetites: Royal Astron. Soc. Geophys. Jour., v. 16, no. 3, p. 225-233, illus., table, 1968.

269-425 **Sanver, M.** A palaeomagnetic study of Quaternary volcanic rocks from Turkey: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 403-421, illus., tables, 1968.

Sanz, H. G. See *Wasserburg, G. J. 264-042*

Sapa, M. See *Chwaszczewska, J. 269-065*

Sapov. O. P. See *Leonov, N. N. 264-135*

267-177 **Sapozhnikov, B. G.** Nablyudeniya s apparaturoy ANCh-1 pri vysokom perekhodnom soprotivlenii priyemnoy tsepi [Observations with the ANCh-1 apparatus in the case of high transient resistance of the receiver circuit]: Geofiz. Apparatura, no. 27, p. 135-140, illus., 1966.

Sapozhnikov, R. B. See *Davydov, N. G. 264-499*

Sapozhnikov, R. B. See *Kunin, N. Ya. 275-377*

Sapuzhak, A. F. See *Sapuzhak, Ya. S. 266-228*

266-227 **Sapuzhak, Ya. S.; Kravchenko, A. P.; Kravchenko, V. A.** K metodike izucheniya gorstovykh struktur Pripyatskogo vala elektricheskimi metodami [On the procedure of studying the horst structures of the Pripyat swell by electrical methods (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 58-66, illus., 1967.

266-228 **Sapuzhak, Ya. S.; Shamotko, V. I.; Sapuzhak, A. F.** O primenimosti elektricheskikh metodov pri poiskakh sernykh mestorozhdeniy Predkarpat'ya [On the applicability of electrical methods in prospecting for sulfur deposits in Ciscarpathia (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 106-112, illus., 1967.

267-247 **Sara, W. A.** Franz Josef and Fox Glaciers, 1951-1967: New Zealand Jour. Geology and Geophysics, v. 11, no. 3, p. 768-780, illus., table, 1968.

269-266 **Sarawak Shell Oilfields Ltd.** Offshore exploration operations in Northwest Borneo, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: United Nations ECAFE Mineral Resources Devel. Series, no. 26, p. 561-573, illus., 1967.

Sarazin, Gérard. See *Allegre, Claude-J. 274-300*

272-024 **Sarkar, S. N.; Saha, A. K.; Miller, J. A.** Geochronology of the Pre-Cambrian rocks of Singhbhum and adjacent regions, eastern India: Geol. Mag., v. 106, no. 1, p. 15-45, illus., tables, 1969.

Sarkisyan, I. S. See *Volkov, E. V. 269-700*

Sarma, S. See *Ambraseys, N. N. 274-086*

Sarma, S. K. See *Ambraseys, N. N. 266-102*

Sarma, S. V. S. See *Sanker Narayan, P. V. 264-423*

Sarma, Y. S. See *Sanker Narayan, P. V. 271-338*

Sarma, Y. S. See *Sanker Narayan, P. V. 274-330*

Sarumova, K. See *Babak, A. P. 269-710*

274-147 **Sarva Jit; Ben-Menahem, Ari.** Eigenvibrations of the Earth excited by finite dislocations—[Pt.] 1, Toroidal oscillations: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 151-177, illus., table, 1969.

Sasai, Yoichi. See *Rikitake, Tsuneji. 264-352*

271-339 **Sasai, Yoichi.** Spatial dependence of short-period geomagnetic fluctuations on Oshima Island, [Pt.] 2 [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 907-926, illus., tables, 1968.

268-394 **Sasajima, Sadao; Nishida, Junichi; Shimada, Masahiko.** Paleomagnetic evidence of a drift of the Japanese main island during the Paleogene period: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 135-141, illus., tables, 1968.

270-270 **Sasajima, Sadao; Maenaka, Kazuaki.** Variation of the geomagnetic field intensity since the late Miocene: Jour. Geophys. Research, v. 74, no. 4, p. 1037-1051, illus., tables, 1969.

270-275 **Sasajima, Sadao; Shimada, Masahiko; Nishida, Junichi.** Paleomagnetism of the Paleogene system in the inner zone of Southwest Japan, with special reference to the paleomagneto-chronology [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 74, no. 12, p. 607-616, illus., tables, 1968.

271-369 **Sasajima, Sadao.** A consideration on paleomagnetic stratigraphy, with special reference to its development and present state of the study [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 75, no. 1, p. 13-25, illus., 1969.

Sasaki, Koichi. See *Kasahara, Keichi. 266-134*

Sasaki, Koichi. See *Shibano, Mutsuro. 266-137*

Sasaki, Koichi. See *Kasahara, Keichi. 266-138*

269-619 **Sasaki, Tsuneo.** The signal-to-noise ratio in seismic records, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: U.N. ECAFE Mineral Resources Devel. Series, no. 26, p. 524-528, illus., 1967.

264-280 **Sass, J. H.; Munroe, Robert J.; Lachenbruch, Arthur H.** Measurements of geothermal flux through poorly consolidated sediments: Earth and Planetary Sci. Letters, v. 4, no. 4, p. 293-298, illus., table, 1968.

272-227 **Sass, J. H.; Killeen, P. G.; Mustonen, E. D.** Heat flow and surface radioactivity in the Quirke Lake syncline near Elliot Lake, Ontario, Canada: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1417-1428, illus., tables, 1968.

Sastry, T. S. See *Babu, Rao, V. 267-402*

267-627 **Sato, Hisayoshi; Kato, Munehiko.** Present status of log interpretation for shaly sands in Japan, *in* Symposium on development of petroleum resources of Asia and the Far East, 3d, Proc., V. 2, Pts. 2D-2E: United Nations Econ. Comm. Asia and Far East Mineral Resources Devel. Ser., no. 26, v. 2, p. 132-136, illus., table, 1967.

272-532 **Sato, Hisayoshi.** Logging methods in Japan, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. H1-H23, illus., tables, 1968.

265-185 **Sato, R.; Espinosa, A. F.** Reflection and transmission coefficients of SH waves at a solid-firmoviscous boundary [with French and German abs.]: Annales Géophysique, v. 24, no. 2, p. 709-714, illus., 1968.

269-231 **Sato, R.; Lapwood, E. R.** SH waves in a transversly isotropic medium—[Pt.] 2, Transradially isotropic cylinder: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 461-473, illus., 1968.

271-084 **Sato, Ryosuke.** Effect of spherical crustal layering (SH waves): Jour. Physics Earth, v. 16, no. 1, p. 1-6, illus., table, 1968.

271-086 **Sato, Ryosuke.** On the amplitude-epicentral distance curves of body waves: Jour. Physics Earth, v. 16, no. 2, p. 45-54, illus., table, 1968.

271-118 **Sato, Ryosuke.** Body wave amplitude near shadow boundary—SH waves: Jour. Physics Earth, v. 16, no. 2, p. 55-59, illus., 1968.

Sato, T. See *Den, N. 271-506*

264-546 **Sato, Takahiro; Kagami, Hideo; Kobayashi, Kazuo; Mii, Hideo; Mitsushio, Hiromi; Nasu, Noriyuki.** Deep sea research off Boso Peninsula, Japan (Geological results in the JEDS-4 and 5): Tokyo Univ. Ocean Research Inst. Collected Reprints 1967, v. 6, p. 108-121, 1968; reprinted from Jour. Marine Geology, v. 3, no. 1, p. 1-14, illus., tables, 1964.

Sato, Takahiro. See *Uyeda, Seiya. 270-232*

Sato, Y. See *Landismàn, M. 274-113*

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Sato, Yasuo. See *Kawasumi, Hirosi. 264-122*

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Sato, Yasuo. See *Usami, Tatsuo. 271-312*

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Sato, Yosiko. See *Akimoto, Syun-iti. 272-263*

Sattinger, Irvin J. See *Muir, Allan H. 270-119*

271-563 **Sattlegger, J. W.** Three-dimensional seismic depth computation using space-sampled velocity logs: Geophysics, v. 34, no. 1, p. 7-20, illus., 1969.

Sattran, V. See *Legierski, J. 271-030*

Satyanarayana Rao, M. V. See *Balakrishna, S. 265-198*

Saubanova, S. G. See *Shamkova, V. B. 275-455*

264-015 **Saucier, Roger T.** A new chronology for braided stream surface formation in the lower Mississippi Valley: Southeastern Geology, v. 9, no. 2, p. 65-76, illus., 1968.

Sauer, K. See *Rothe, J. P. 265-271*

270-429 **Saunders, John M.; Havey, Robert W.** Development of a narrow-beam, bathymetric programmer, *in* Marine sciences instrumentation, V. 4—Instrument Soc. America Symposium, 4th Natl., Cocoa Beach, Fla., 1968, Proc.: New York, Plenum Press, p. 70-77, illus., tables, 1968.

Saurin, Edmond. See *Lasserre, Marc. 275-015*

271-026 **Sauvé, Pierre; LaSalle, Pierre.** Notes sur la géologie gláciaire de la région de Manic 2 [Notes on the glacial geology of the region of Manic 2 (with English abs.)], *in* Editions speciales du centenaire, 1868-1968—Sciences de la terre: Naturaliste Canadien, v. 95, no. 6, p. 1293-1300, illus., 1968.

269-220 **Savage, J. C.** Comments on paper by R. B. Gordon and L. A. Davis, "Velocity and attenuation of seismic waves in imperfectly elastic rock" [1968]: Jour. Geophys. Research, v. 74, no. 2, p. 726-728, illus., 1969.

Savage, J. C. See *Clee, T. E. 270-201*

272-507 **Savage, J. C.** Steketee's paradox: Seismol. Soc. America Bull., v. 59, no. 1, p. 381-384, illus., 1969.

274-075 **Savage, J. C.** A new method of analyzing the dispersion of oceanic Rayleigh waves: Jour. Geophys. Research, v. 74, no. 10, p. 2608-2617, illus., tables, 1969.

266-105 **Savarenskiy, Ye. F.** On the prediction of earthquakes, *in* Earthquake prediction—Proceedings of a symposium, Zurich, Switzerland, 1967: Tectonophysics, v. 6, no. 1, p. 17-27, illus., 1968.

266-145 **Savarenskiy, Ye. F.** Tashkentskoy zemletryaseniye i yego vozmozhnyye prichiny [The Tashkent earthquake and its possible causes]: Akad. Nauk SSSR Vestnik, no. 8, p. 34-43, illus., 1966.

Savarenskiy, Ye. F. See *Starovoyt, O. E. 267-321*

267-322 **Savarenskiy, Ye. F.; Peshkov, A. B.** Ob ispol'zovanii skorostey poverkhnostnykh voln pri vybore modeley stroyeniya zemnoy kory [On the use of surface wave velocities in choosing a model of crustal structure]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 79-87, illus., tables, 1968.

270-337 **Savarenskiy, Ye. F.; Proskuryakova, T. A.; Glasko, V. B.; Granit, Y. Sh.; Voronina, E. V.** On the lateral refraction of Rayleigh surface waves and microseisms in the North Atlantic: Royal Astron. Soc. Geophys. Jour., v. 15, no. 5, p. 529-544, illus., tables, 1968.

273-140 **Savarenskiy, Ye. F.** O zadachakh seysmologii i deyatel'nosti Mezhduvedomstvennogo soveta po seysmologii i seysmostoykomu stroitel'stvu [On the problems of seismology and the activity of the Interdepartmental Council on Seismology and Earthquake-Resistant Construction]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 112-116, 1969.

274-290 **Savarenskiy, Ye. F.; Bozhko, G. N.; Kukhtikova, T. I.; Peshkov, A. B.; Popov, I. I.; Shechkov, B. N.; Yurkevich, O. I.; Yudakova, L. M.** On the Earth structure in some regions of the USSR from surface waves data: Pure and Appl. Geophysics, v. 73, p. 99-119, illus., tables, 1969.

274-409 **Savarenskiy, Ye. F.; Proskuryakova, T. A.; Glasko, V. B.; Granit, Ya. Sh.; Voronina, Ye. V.** O bokovoy refraktsii voln Releya ot zemletryaseniy i mikroseysm v severnoy chasti Atlanticheskogo okeana [On lateral refraction of Rayleigh waves from earthquakes and microseisms in the northern part of the Atlantic Ocean]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 62-70, illus., tables, 1969.

Savenko, B. Ya. See *Lebedev, T. S. 266-478*

265-423 **Savich, M. G.** K teorii rasprostraneniya elektromagnitnykh poley v magnetosfere [On the theory of the distribution of electromagnetic fields in the magnetosphere]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 98-102, illus., 1968.

Savin, A. P. See *Vasil'yev, P. I. 270-148*

266-358 **Savinskiy, K. A.; Tugolesov, D. A.** Geofizicheskaya kharakteristika i nekotoryye osobennosti glubinnogo stroyeniye Sibirskoy platformy [Geophysical characteristics and some features of the deep structure of the Siberian platform], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 59-74, illus., 19677.

Savinskiy, K. A. See *Trofimuk, A. A. 275-170*

275-176 **Savinskiy, K. A.; Kogan, A. B.; Mandel'baum, M. M.; Tkachenko, V. V.; Babayan, G. D.; Gurevich, B. N.; Tokarev, A. S.; Feygin, Ye. B.** Osnovnyye voprosy metodiki regional'nykh geofizicheskikh rabot na Sibirskoye platforme [Fundamental problems of procedure of regional geophysical operations on the Siberian platform]: Geologiya Nefti i Gaza, no. 2, p. 31-33, 1969.

268-573 **Savit, Carl H.** Mnogokratnoye otrazheniye v morskikh seysmicheskikh issledovaniyakh [Multiple reflections in marine seismic investigations], *in* Neft' i more—Internat. Conf. on Petroleum and the Sea, 1st, Monte Carlo, Monaco 1965, V. 1: Moscow, Izdatel'stvo "Nedra," p. 148-163, illus., 1967; originally published in English, 1965.

272-480 **Savosin, S. I.; Berzin, A. K.; Leypunskaya, D. I.; Sulin, V. V.; Shimelevich, Yu. S.** Osnovnyye napravleniya ispol'zovaniya tipovoy apparatury dlya aktivatsionnogo analiza pri issledovanii gornykh porod i rud [Main trends in the use of standard activation-analysis apparatus in investigating rocks and ores], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 20-41, illus., tables, 1968.

Savosin, S. I. See *Blankov, Ye. B. 272-563*

274-148 **Sawyers, K. N.; Rivlin, R. S.** Seismic wave propagation in a self-gravitating anisotropic Earth: Royal Soc. London Philos. Trans., ser. A, v. 263, no. 1146, p. 615-655, illus., 1969.

267-139 **Sawyers, Kenneth N.** Theoretical changes in seismic travel time with changes in stress at depth: Seismol. Soc. America Bull., v. 58, no. 5, p. 1667-1680, tables, 1968.

265-605 **Sax, Robert L.** Stationarity of seismic noise: Geophysics, v. 33, no. 4, p. 668-674, illus., tables, 1968.

Saxov, S. See *Ramachandra, B. L. 271-271*

Sayanina, F. A. See *Alekseyev, F. A. 272-481*

268-267 **Sayyab, Abdullah; Valek, Rostislav.** Patterns and general properties of the gravity field of Iraq, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 129-142, illus., tables, 1968.

Sazhina, N. B. See *Grushinskiy, N. P. 272-223*

Sazonov, A. M. See *Ditev, A. A. 265-687*

Sazonov, A. M. See *Dolgirev, Ye. I. 270-347*

271-502 **Sazonov, A.. M.** O vozmozhnostyakh ispol'zovaniya yaderno magnitnogo rezonansa dlya elementarnogo analiza veshchestva [On the possibilities of using nuclear magnetic resonance for element analysis of a substance]: Geofiz. Apparatura, no. 31, p. 48-57, 1967.

Scarbrough, W. L. See *Joiner, T. J. 265-216*

Scarf, F. L. See *Fredricks, R. W. 269-396*

269-045 **Schaeffer, O. A.** Direct dating of fossils by the helium-uranium method, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 395-402, illus., table, 1967.

272-191 **Schaer, J.-P.** Ampleur et vitesse des deformations de la croute terrestre [The amplitude and rate of deformations of the Earth's crust]: Annales Guebhard, 1966-67, v. 42-43, p. 65-82, 1967[,].

Schafer, Karlheinz. See *Orliac, Jacques. 273-037*

272-543 **Schaller, Herman E.** Subsurface flow measurements in producing wells, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. S1-S11, illus., 1968.

Scharon, LeRoy. See *Baag, Czang-go. 267-463*

274-358 **Scharon, LeRoy; Hsu, I-Chi.** Paleomagnetic investigation of some Arkansas alkalic igneous rocks: Jour. Geophys. Research, v. 74, no. 10, p. 2774-2779, illus., tables, 1969.

271-003 **Scharpenseel, H. W.; Pietig, F.; Tamers, M. A.** University of Bonn natural radiocarbon measurements II: Radiocarbon, v. 11, no. 1, p. 3-14, 1969.

271-038 **Schaudy, R.; Kiesl, W.; Hecht, F.** Activation analytical determination of elements in meteorites, [Pt.] 2: Chem. Geology, v. 3, no. 4, p. 307-312, tables, 1968.

Scheidegger, A. E. See *Ranalli, G. 274-241*

Scheidegger, Adrian Eugen. See *Ranalli, G. 265-127*

269-030 **Schell, W. R.; Fairhall, A. W.; Harp, G. D.** An analytic model of Carbon-14 distribution in the atmosphere, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 79-92, illus., tables, 1967.

271-368 **Schenk, E.** Über die Magnetisierung der Tuffe und Palaosole im Päläovulkan des Vogelsberges [On the magnetization of the tuffs and fossil soils of the Vogelsberg paleovolcano (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 6, p. 567-598, illus., tables, 1968.

Scherbak, A. P. See *Semenenko, N. P. 273-020*

268-104 **Scherer, Lee R.** The first four Lunar Orbiter photographic missions, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 145-177, illus., 1968.

265-132 **Schick, R.** Untersuchungen über die Bruchausdehnung und Bruchgeschwindigkeit bei Erdbeben mit kleinen Magnituden (M<4) [Investigations on the length and rate of faulting in earthquakes with small magnitudes (M<4) (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 3, p. 267-286, illus., 1968.

Schidlowski, M. See *Hoefs, J. 274-295*

268-380 **Schield, M. A.; Freeman, J. W.; Dessler, A. J.** A source for field-alined currents at auroral latitudes: Jour. Geophys. Research, v. 74, no. 1, p. 247-256, illus., 1969.

270-256 **Schield, M. A.** Pressure balance between solar wind and magnetosphere: Jour. Geophys. Research, v. 74, no. 5, p. 1275-1286, illus., tables, 1969.

266-292 **Schimke, Gerald R.; Bufe, Charles G.** Relationship of Chautauqua Seamount to sea floor spreading in the North Pacific Ocean: Nature, v. 219, no. 5161, p. 1351-1352, illus., 1968.

268-424 **Schimke, Gerald R.; Bufe, Charles G.** Reply [to comments by Jean Francheteau and others on "Geophysical description of a Pacific Ocean seamount" (1968)]: Jour. Geophys. Research, v. 73, no. 24, p. 7716-7717, illus., 1968.

272-308 **Schindler, Karl.** Laboratory experiments related to the solar wind and the magnetosphere, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968, invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 51-75, illus., tables, 1969.

Schlanger, S. O. See *Hsu, K. J. 268-227*

267-401 **Schlapp, D. M.** World-wide morphology of day-to-day variability of Sq: Jour. Atmos. and Terrest. Physics, v. 30, no. 10, p. 1761-1776, illus., tables, 1968.

Schlich, R. See *Van-Chi, Fam. 264-375*

265-397 **Schlich, R.** Effet de modulation ionosphérique sur la corrélation observeé entre des pulsations magnétiques de moyenne latitude [Effect of ionospheric modulation on the correlation observed between magnetic pulsations of middle latitude (with English abs.)]: Annales Géophysique, v. 24, no. 2, p. 411-429, illus., tables, 1968.

267-460 **Schlich, R.; Patriat, Ph.** Profils magnétiques sur la dorsale médico-océanique "Indo-Pacifique" [Magnetic profiles on the "Indo-Pacific" mid-oceanic dorsal (with English abs.)]: Annales Géophysique, v. 23, no. 4, p. 629-633, illus., 1967.

272-232 **Schlosser, P.** Eine erste Einschätzung der geothermischen Parameter im obersten Bereich der Erdkruste des mittleren und nordlichen Teils der Territoriums der DDR und ihre Bindung an geologisch-geophysikalische Strukturelemente [A first estimate of the geothermal parameters in the uppermost region of the Earth's crust in the central and northern part of the territory of the German Democratic Republic and their relationship to geologic-geophysical structural elements]: Freiberger Forschungshefte C 238, p. 13-22, illus., 1968.

266-567 **Schmeling, Renate; Buckup, Klaus; Lohse, Jürgen.** Das Zementlog—ein akustisches Verfahren zur Zementationskontrolle [The cement log—An acoustic method of cementation monitoring (with English and Russian summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 3, p. 141-146, illus., 1968.

268-417 **Schmidbauer, E.; Petersen, N.** Some magnetic properties of two basalts under uniaxial compression measured at different temperatures: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 169-180, illus., 1968.

265-616 **Schmidt, Edgar.** Verfahren zur Auswertung reflexionsseismischer Untertagemessungen nach der Spiegelpunktmethode [Procedure for interpreting underground seismic reflection measurements by the image point method (with English summ.)]: Geophys. Prosp. [Netherlands], v. 16, no. 2, p. 247-268, illus., 1968.

Schmidt, G. See *Bird, H. H. 275-299*

274-329 **Schmidt, Herbert; Lenners, Dietrich.** Zum Stand der Datenverarbeitung am Adolf-Schmidt-Observatorium in Niemegk [On the state of data processing at the Adolf Schmidt Observatory in Niemegk (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 180-189, illus., 1969.

268-021 **Schmidt, Klaus; Jäger, Emilie; Grunenfelder, Marc; Grögler, Norbert.** Rb-Sr- und U-Pb-Altersbestimmungen an Proben des Ötztalkristallins und des Schneeberger Zuges [Rb-Sr and U-Pb age determinations on samples of the Ötztal crystalline and the Schneeberger Range (with English abs.)]: Eclogae Geol. Helvetiae, v. 60, no. 2, p. 529-536, illus., tables, 1967.

Schmidt, Klaus. See *Miller, Donald S. 268-022*

Schmitt, R. A. See *Loveland, W. 274-033*

Schmitt, Roman A. See *Theisen, Arthur A. 265-594*

270-006 **Schnable, Jon E.; Goodell, H. Grant.** Pleistocene-Recent stratigraphy, evolution, and development of the Apalachicola coast, Florida: Geol. Soc. America Spec. Paper 112, 72 p., illus., tables, 1968.

273-036 **Schneekloth, Heinrich.** Vergleichende pollenanalytische und ^{14}C-Datierungen an einigen Mooren im Solling [Comparative pollen-analytical and C-14 datings on some bogs in the Solling (with English and French summ.)]: Geol. Jahrb., v. 84, p. 717-734, illus., tables, 1967.

Schneider, G. See *Hiller, W. 265-130*

266-103 **Schneider, G.** Erdbeben und Tektonik in Sudwest-Deutschland [Earthquakes and tectonics in southwest Germany (with English summ.)]: Tectonophysics, v. 5, no. 6, p. 459-511, illus., tables, 1968.

Schober, Manfred. See *Schult, Axel. 273-176*

Schoellhamer, J. E. See *McCulloh, T. H. 272-539*

265-606 **Schoenberger, Michael.** Discussion of "Three-dimensional filtering with an array of seismometers" by John P. Burg (Geophysics, October 1964, p. 693-713): Geophysics, v. 33, no. 4, p. 679-680, 1968.

266-562 **Schofield, J. C.** Regional aspects of Cainozoic volcanology in the North Island of New ZealandSCrustal fusion produces intermediate magma: New Zealand Jour. Geology and Geophysics, v. 11, no. 2, p. 277-290, illus., tables, 1968.

269-005 **Scholl, David Q.; Craighead, Frank C., Sr.; Stuiver, Minze.** Florida submergence curve revised—Its relation to coastal sedimentation rates: Science, v. 163, no. 3867, p. 562-564, illus., 1969.

269-680 **Scholl, David W.; Buffington, Edwin C.; Hopkins, David M.** Geologic history of the continental margin of North America in the Bering Sea: Marine Geology, v. 6, no. 4, p. 297-330, illus., 1968.

273-254 **Scholten, R.** Model for evolution of Rocky Mountains east of Idaho batholith: Tectonophysics, v. 6, no. 2, p. 109-126, illus., 1968.

274-230 **Scholten, Robert; Ramspott, L. D.** Tectonic mechanisms indicated by structural framework of central Beaverhead Range, Idaho-Montana: Geol. Soc. America Spec. Paper 104, 71 p., illus., tables, 1968.

273-113 **Scholz, C. H.; Wyss, M.; Smith, S. W.** Seismic and aseismic slip on the San Andreas ult: Jour. Geophys. Research, v. 74, no. 8, p. 2049-2069, illus., tables, 1969.

Scholz, C. H. See *Brace, W. F. 273-316*

268-119 **Scholz, Christopher H.** Worldwide distribution of earthquakes: Nature, v. 221, no. 5176, p. 165, 1969.

Schonfeld, E. See *King, E. A., Jr. 270-023*

271-179 **Schopf, James M.** Ellsworth Mountains—Position in West Antarctica due to sea-floor spreading: Science, v. 164, no. 3875, p. 63-66, illus., 1969.

274-471 **Schouler, A. B.; Wells, J. C.; Walstrom, J. E.** Formation evaluation in Alaska [abs.], *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. B1, 1969.

274-411 **Schreiber, B.; Tassi Pelati, L.; Mezzadri, M. G.; Motta, G.** Gross beta radioactivity in sediments of the North Adriatic Sea—A possibility of evaluating the sedimentation rate [with Italian abs.]: Archivio Oceanografia e Limnologia, v. 16, pt. 1, p. 45-62, illus., tables, 1968.

Schreiber, Edward. See *Liebermann, Robert C. 266-177*

Schreiber, Edward. See *Anderson, Orson L. 269-222*

269-016 **Schreiner, G. D. L.; Basson, H. H.; Verbeek, A. A.** Potassium-argon dating of the Cape Granite and a granitized xenolith at sea point: Talanta, v. 15, no. 11, p. 1125-1133, illus., tables, 1968.

Schreiner, Robert N. See *Galbraith, Frank W. 267-145*

268-113 **Schroeder, W. L.; Schuster, R. L.** Liquefaction phenomena in saturated sands, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 1-22, illus., table, 1968.

274-306 **Schroll, E.** Anomalous composition of lead isotopes in the lead-zinc deposits of the Calcareous Alps sediments: Mining and Metallurgy Quart. (Rudarsko-Metalurski Zbornik), no. 2, p. 7-24, illus., tables, 1966.

268-052 **Schubert, G.; Whitehead, J. A.** Moving flame experiment with liquid mercury—Possible implications for the Venus atmosphere: Science, v. 163, no. 3862, p. 71-72, illus., 1969.

Schubert, Gerald. See *Peale, Stanton J. 268-091*

269-391 **Schubert, Gerald; Cummings, W. D.** Effect of high electron-proton temperature ratios on the double shock wave structure in the solar wind: Jour. Geophys. Research, v. 74, no. 3, p. 897-899, illus., 1969.

Schubert, Gerald. See *Lingenfelter, Richard. 274-054*

266-546 **Schubert, Kurt.** Die Scherfestigkeit gebrochener Gesteinsmaterialen unter hohen Normalspannungen [The shear strength of broken rock materials under high normal stresses]: Zeitschr. Angew. Geologie, v. 14, no. 3, p. 135-138, illus., tables, 1968.

271-170 **Schubert, S. Roy.** On the integral formulas of Stokes and Vening Meinesz: Bull. Geod., no. 90, p. 427-434, illus., 1968.

Schuiling, R. D. See *Collette, B. J. 265-335*

Schukin, Yu. K. See *Beliayevsky, N. A. 265-354*

Schulman, N. See *Yaron, F. 266-037*

265-195 **Schult, Axel.** Methoden zur Messung von physikalischen Eigenschaften an Gesteinen und Mineralen bei hohen statischem Druck [Methods of measuring physical properties on rocks and minerals at high static pressure]: Zeitschr. Geophysik, v. 34, no. 3, p. 227-257, illus., 1968.

267-443 **Schult, Axel.** The effect of pressure on the Curie temperature of magnetite and some other ferrites (with German summ.)]: Zeitschr. Geophysik, v. 34, no. 5, p. 505-511, illus., 1968.

273-176 **Schult, Axel; Schober, Manfred.** Measurement of electrical conductivity of natural olivine at temperatures up to 950°C and pressures up to 42 kbar: Zeitschr. Geophysik, v. 35, no. 2, p. 105-112, illus., tables, 1969.

Schulz, Michael. See *Roberts, Charles S. 268-370*

272-300 **Schulz, Michael; Eviatar, Aharon.** Diffusion of equatorial particles in the outer radiation zone: Jour. Geophys. Research, v. 74, no. 9, p. 2182-2192, illus., tables, 1969.

Schulz, Michael. See *Roederer, Juan G. 275-301*

274-053 **Schumm, S. A.; Simons, D. B.** Lunar rivers or coalesced chain craters,: Science, v. 165, no. 3889, p. 201, illus., 1969.

270-230 **Schuster, Klaus.** Methodische und apparative Entwicklungen geothermischer Verfahren fur Anwendungen im Bergbau und in der Tiefenerkundung [Methodological and apparatal developments of geothermal procedures for application in mining and in deep investigations]: Freiberger Forschungshefte, C 232, p. 5-45, illus., tables, 1968.

Schuster, R. L. See *Schroeder, W. L. 268-113*

Schwartz, K. See *Sonett, C. P. 265-082*

Schwartz, K. See *Sonett, C. P. 266-067*

265-435 **Schwarz, E. J.** A recording thermomagnetic balance: Canada Geol. Survey Paper 68-37, 11 p., illus., 1968.

272-354 **Schwarz, E. J.** Thermomagnetic analysis of some red beds: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 333-338, illus., 1969.

272-356 **Schwarz, E. J.** Thermomagnetic properties of banded manganiferous sediment from the Mid-Atlantic Ridge: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1517-1518, illus., 1968.

275-330 **Schwarz, E. J.; Symons, D. T. A.** Geomagnetic intensity between 100 million and 2500 million years ago: Physics Earth and Planetary Interiors, v. 2, no. 1, p. 11-18, illus., table, 1969.

268-539 **Schwarz, Sigmund D.** Geophysical site exploration, Third Lake Washington Floating Bridge, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 147-156, illus., 1968.

272-201 **Schwarzbach, Martin.** Neuere Eiszeithypothesen [Recent ice age hypotheses (with English summ.)]: Eiszeitalter u. Gegenwart, v. 19, p. 250-261, illus., 1968.

265-663 **Schwerdtner, W. M.** Intragranular gliding in domal salt: Tectonophysics, v. 5, no. 5, p. 353-380, illus., tables, 1968.

Sci. Council Japan. See *Natl. Committee for IIOE. 270-437*

273-085 **Sclar, Charles B.; Short, Nicholas M.; Cocks, George G.** Shock-wave damage in quartz as revealed by electron and incident-light microscopy, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 483-493, illus., 1968.

Sclater, J. G. See *Francheteau, Jean. 268-423*

270-226 **Sclater, J. G.; Corry, C. E.; Vacquier, V.** In situ measurement of the thermal conductivity of ocean-floor sediments: Jour. Geophys. Research, v. 74, no. 4, p. 1070-1081, illus., tables, 1969.

Sclater, John G. See *Warren, Robert E. 275-250*

Scott, Diana W. See *King-Hele, D. G. 265-315*

Scott, Diana W. See *King-Hele, D. G. 273-224*

264-309 **Scott, Martha R.** Thorium and uranium concentrations and isotope ratios in river sediments: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 245-252, illus., tables, 1968.

268-080 **Scott, R. F.; Roberson, F. I.** Soil mechanics surface-sampler, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 135-185, illus., 1968.

275-073 **Scott, R. F.; Roberson, F. I.** Soil mechanics surface sampler, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 195-207, illus., 1969.

264-064 **Scott, Ronald F.** The density of the lunar surface soil: Jour. Geophys. Research, v. 73, no. 16, p. 5469-5471, 1968.

264-536 **Scott, Ronald F.** In-place soil mechanics measurements, *in* Marine geotechnique—Internat. Research Cong., Monticello, Ill., 1966, Proc.: Urbana, Ill., Univ. Illinois Press, p. 264-273, illus., table, 1967.

271-142 **Scott, W. J.; West, G. F.** Induced polarization of synthetic, high-resistivity rocks containing disseminated sulfides: Geophysics, v. 34, no. 1, p. 87-100, illus., tables, 1969.

Scotto, V. See *Giorgi, M. 266-430*

275-187 **Scull, Wilfred E.** The orbiting geophysical observatories: IEEE Trans. Geosci. Electronics, v. GE-7, no. 2, p. 55-60, illus., tables, 1969.

Seal, R. T., Jr. See *Koomen, M. J. 268-106*

270-504 **Sebestyén, Károly; Szalay, M.; Körös, I.; Rozs, G.** Karottázs szelvények automatikus feldolgozasával kapcsolatos munkák a Geofizikai Intézetben [Work in connection with automatic processing of well logs at the Geophysical Institute (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 164-171, illus., 1968.

Sechkin, V. A. See *Volovov, V. I. 268-610*

273-240 **Secor, Donald T., Jr.** Mechanics of natural extension fracturing at depth in the Earth's crust, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 3-47, illus.; discussion, p. 48, 1969.

274-031 **Secretan, Luc; Berg, Otto E.** A new criterion for the identification of micrometeor impact sites on aluminized glass: Jour. Geophys. Research, v. 74, no. 14, p. 3681-3692, illus., 1969.

Sedel'nikov, E. S. See *Rogachev, B. V. 274-190*

Sedin, A. M. See *Shterengrats, Ye. M. 267-586*

266-439 **Sedova, F. I.** K mikrostruktur geomagnitnykh bur' [On the fine structure of geomagnetic storms (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 164-168, illus., 1967.

Seeber, Leonardo. See *Mitronovas, Walter. 275-089*

267-109 **Seed, H. Bolton.** Landslides during earthquakes due to soil liquefaction: Am. Soc. Civil Engineers Proc., v. 94, paper 6110, Jour. Soil Mechanics and Found. Div., no. SM5, p. 1055-1122, illus., table, 1968.

Seed, H. Bolton. See *Idriss, I. M. 269-191*

270-071 **Seed, H. Bolton; Idriss, Izzat M.** Influence of soil conditions on ground motions during earthquakes: Am. Soc. Civil Engineers Proc., v. 95, paper 6347, Jour. Soil Mechanics and Foundations Div., no. SM 1, p. 99-137, illus., tables, 1969.

273-119 **Seed, H. Bolton.** Soil stability problems caused by earthquakes: erkeley, Calif., California Univ. Dept. Civil Eng., 20 p., illus., table, 1967.

267-070 **Seeger, C. Ronald.** Origin of the Jeptha Knob structure, Kentucky: Am. Jour. Sci., v. 266, no. 8, p. 630-660, illus., tables, 1968.

Segawa, Jiro. See *Yoshibumi, Tomoda. 264-257*

Segawa, Jiro. See *Tomoda, Yoshibumi. 264-258*

264-427 **Segawa, Jiro; Ozawa, Keijiro; Tomoda, Yoshibumi.** Local magnetic anomalies in the North Pacific Ocean [with French and Japanese abs.]: Tokyo Univ. Ocean Research Inst. Collected Reprints 1967, v. 6, p. 79-91, 1968; reprinted from La Mer, v. 5, no. 1, p. 8-20, illus., 1967.

Segawa, Shuryo. See *Nishimura, Kasuke. 275-112*

272-029 **Šegota, Tomislav.** Paleotemperature changes in the Upper and Middle Pleistocene: Eiszeitalter u. Gegenwart, v. 18, p. 127-141, illus., 1967.

272-523 **Segre, Aldo G.** Notizie sulla morfologia submarina di Stromboli [Notes on the submarine morphology of Stromboli]: Stromboli, no. 11, p. 45-50, illus., no date.

269-257 **Séguin, Maurice.** Discovery of direct-shipping iron ore by geophysical methods in northern Canada: Canadian Mining and Metall. Bull., v. 61, no. 676, p. 950-959, illus., tables, 1968.

Seide, C. See *Yiou, F. 272-277*

Seidelmann, P. K. See *Suncombe, R. L. 267-080*

265-269 **Seigel, H. O.; Hill, H. L.; Baird, J. G.** Discovery case history of the Pyramid ore bodies, Pine Point, Northwest Territories, Canada: Geophysics, v. 33, no. 4, p. 645-656, illus., 1968.

Seigel, H. O. See *Pemberton, R. H. 274-223*

Seino, Masaaki. See *Yoshidome, Michiya. 275-432*

270-081 **Seismol. Soc. Japan.** Seismology in Japan [in Japanese]: Zisin, ser. 2, v. 20, no. 4, 326 p., illus., tables, 1967.

275-364 **Seki, Yotaro.** Facies series in low-grade metamorphism [in Japanese with English abs.]: Geol. Soc. Japan Jour., v. 75, no. 5, p. 247-254, illus., tables, 1969.

Seletskiy, Yu. B. See *Ferronskiy, V. I. 265-599*

Selim, Ezzat T. M. See *El-Kholy, Sayed B. 266-408*

Seliverstov, B. P. See *Rapoport, M. B. 266-523*

Seliverstov, B. P. See *Chervonskiy, M. I. 266-524*

Sellers, Bach. See *Vancour, Roger P. 264-323*

Sellevoll, Markvard A. See *Sornes, Anders. 269-614*

265-407 **Selzer, E.** Les sous-orages magnétiques mondiaux [World Magnetic Sub-Storms (with English abs.)]: Annales Géophysique, v. 24, no. 2, p. 607-615, illus., table, 1968.

Selzer, E. See *Glangeaud, F. 267-416*

Semenchenko, V. K. See *Avdulov, M. V. 272-271*

266-041 **Semenenko, N. P.** Absolute geochronology and history of formation of folded Pre-Cambrian zones in the East European Platform, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 569-576, illus., table, 1967; Russian text, Absolyutnaya geokhronologiya i istoriya formirovaniya skladchatykh zon dokembriya vostochno-evropeyskoy platformy, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

273-020 **Semenenko, N. P.; Scherbak, A. P.; Vinogradov, A. P.; Tougarinov, A. I.; Eliseyeva, G. D.; Kotlovskaya, F. I.; Demidenko, S. G.** Geochronology of the Ukrainian Precambrian, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 661-671, illus., 1968.

275-028 **Semenenko, N. P.** Absolyutnaya geokhronologiya i istoriye formirovaniye skladchatykh zon dokembriya Vostochno-Evropeyskoy platformy [Absolute geochronology and history of formation of the folded zones of the Precambrian of the East European platform] *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 531-538, illus., table, 1964.

275-113 **Semenov, A. N.** Izmeneniye otnosheniya vremen progeba poperechnykh i prodol'nykh voln pered sil'nymi zemletryaseniyami [Change in the traveltime ratio of transverse and longitudinal waves before strong earthquakes]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 72-77, illus., 1969.

265-260 **Semenov, A. S.** Izmereniye soprotivleniya zazamleniy s priborom ESK-1 [Measurement of the resistivity of the grounding with the ESK-1 instrument]: Geofiz. Apparatura, no. 32, p. 91-96, tables, 1967.

Semenov, P. G. See *Leonov, N. N. 265-171*

Semenov, Ye. V. See *Gubin, Yu. A. 270-529*

Semenov, Ye. V. See *Vedekhin, A. F. 271-570*

Semenova, M. N. See *Dolivo-Dobrovol'skiy, A. V. 266-248*

264-190 **Semenova, S. G.** Chastotnaya dispersiya elektricheskikh svoystv gornykh porod [Frequency dispersion of the electrical properties of rocks]: Moskov. Univ. Vestnik, ser. 4, no. 2, p. 103-105, 1968.

265-266 **Semenova, S. G.** Elektricheskiye svoystva izverzhennykh i metamorficheskikh porod v elektromagnitnom pole radiochastotnogo diapazona [The electrical properties of igneous and metamorphic rocks in an electromagnetic field of radiofrequency range]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 74-81, illus., 1968.

Semenova, S. G. See *Zaborovskiy, A. I. 267-183*

Semenova, S. G. See *Zaborovskiy, A. I. 273-196*

Semenovich, V. V. See *Bliskavka, A. G. 275-375*

275-378 **Semin, Yu. A.; Gudenko, V. V.** Nekotoryye rezul'taty poiskovykh geofizicheskikh issledovaniy v Kokpansorskoy vpadine Chu-Sarysuyskoy depressii [Some results of geophysical prospecting investigations in the Kokpansor basin of the Chu-Sary Su depression]: Neftegazovaya Geologiya i Geofizika, no. 1, p. 35-39, illus., 1969.

264-346 **Sen, A. K.** Pearl-type geomagnetic oscillations: Jour. Atmos. and Terrest. Physics, v. 30, no. 3, p. 439-451, illus., 1968.

264-326 **Sen, Amiya K.** Discussion of paper by I. Lerche, "Validity of the hydromagnetic approach in discussing instability of the magnetospheric boundary" [1966]: Jour. Geophys. Research, v. 73, no. 15, p. 5015-5016, 1968.

268-389 **Sen, Amiya K.** A theory of geomagnetic micropulsations, [Pt. 1]: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 225-243, illus., 1968; [Pt.] 2, ibid., p. 245-261, 1968.

Sen Gupta, S. See *Ganguli, D. K. 271-516*

269-599 **Sendlein, Lyle V. A.** Discussion on "Refraction determination of water table depth and alluvium thickness" by James Otto Duguid (Geophysics, June 1968, p. 481-488): Geophysics, v. 33, no. 6, p. 1019-1020, illus., 1968.

Seneta, E. See *Anderssen, R. S. 274-309*

Senftle, F. E. See *Gilchrist, J. 271-033*

Sengbush, R. L. See *Foster, M. R. 268-536*

265-225 **Sengpiel, K. P.; Haak, V.** The natural time-varying earth-electric (telluric) field along a profile across the Rhinegraben and first results of evaluation, *in* The Rhinegraben progress report 1967: Baden-Wurttemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 123-126, illus., 1967.

271-037 **SenGupta, J. G.** Abundances of the six platinum metals in some iron and stony meteorites—Relationships to the theories of evolution of parent bodies of meteorites and the origin of these elements: Chem. Geology, v. 3, no. 4, p. 293-305, illus., tables, 1968.

268-649 **Sen'ko-Bulatnyy, I. N.; Bakhterev, V. V.** K voprosu beskernovykh kolichestvennykh opredeleniy medi v rudakh gamma-spektrometricheskom aktivatsionnym metodom [On the problem of coreless quantitative determinations of copper in ores by the gamma-spectrometric activation method], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 21-27, illus., tables, 1967.

Sen'ko-Bulatnyy, I. N. See *Muzyukin, L. V. 268-652*

269-711 **Sen'ko-Bulatnyy, I. N.; Bakhterev, V. V.; Kharus, R. L.** Nekotoryye voprosy metodiki gamma-spektrometricheskikh izmereniy v mednorudnykh skvazhinakh [Some problems of procedure of gamma-spectrometric measurements in copper ore boreholes], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 6, p. 13-19, illus., 1967.

264-527 **Serata, S.** Application of continuum mechanics to design of deep potash mines in Canada: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 4, p. 293-314, illus., 1968.

264-254 **Serbetci, Muzaffer.** Bestimmung und Berucksichtigung von algebraischen Korrelationen bei Gravimeter-Messungen [Determination and taking into account algebraic correlations in gravimeter measurements]: Bonn, Rheinische Friedrich-Wilhelms-Univ., 157 p., illus., tables, 1968.

272-217 **Şerbetçi, Muzaffer.** Bestimmung und Berücksichtigung von algebraischen Korrelationen bei Gravimetermessungen [Determination and taking into account of algebraic correlation in gravimeter surveys]: Bonn, Rhenische Friedrich-Wilhelms-Univ. Inst. Theorett. Geodäsie, 160 p., illus., tables, 1968.

Serbulenko, M. G. See *Kuznetsov, G. F. 266-493*

268-205 **Serbulenko, M. G.** Lineynyye metody razdeleniya potentsial'nykh poley [Linear methods of separating potential fields], *in* Prilozheniye nekotorykh metodov matematiki k interpretatsii geofizicheskikh dannykh: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologiya i Geofiziki (Izdatel'stvo "Nauka" Sibirskoye Otdeleniye), p. 5-75, illus., table, 1967.

Serdyakov, V. A. See *Duchkov, A. D. 269-709*

Serdyukov, M. K. See *Tsaregradskiy, V. A. 271-301*

Serebryannyy, L. R. See *Devirts, A. L. 272-035*

266-230 **Sergatyuk, A. F.; Sizonenko, V. S.** O primenenii metoda vyzvannoy polyarizatsii pri poiskakh zon polimetallicheskogo orudeneniya v Pridnestrov'ye [On the application of the induced polarization method in prospecting for zones of polymetallic mineralization in the Dniester area (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 127-132, illus., 1967.

271-217 **Sergeyev, K. F.; Sirik, I. M.; Tuyezov, I. K.** Sravitel'naya tektonika Iyedzo-Sakhalinskoy i Kuril'skoy ostrovnykh dug [Comparative tectonics of the Yedzo-Sakhalin and Kurile Island arcs (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 208-210, 1968.

Sergeyev, V. O. See *Konstantinov, G. N. 264-432*

270-297 **Sergeyev, V. O.** Pereschet v verkhneye poluprostranstvo anomalii vertikal'noy sostavlyayushchey magnitnogo polya, zadannoy na slozhnom rel'yefe [Recalculation into the upper half space of anomalies of the vertical components of the magnetic field given on rugged relief], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 155-161, illus., tables, 1967.

Sergiyenko, S. I. See *Makarenko, F. A. 270-233*

274-348 **Serlapov, S. T.** O svyazi nekotorykh geofizicheskikh protsessov Tsentral'noy Antarktidy s izmeneniyami pogody [On the correlation of certain geophysical processes in Central Antarctica with changes in the weather]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 54, p. 12-14, illus., 1965.

Serova, A. D. See *Nevolin, N. V. 269-271*

Serralheiro, A. See *Assuncao, C. T. de. 268-229*

275-362 **Serruya, C.; Leenhardt, O.** Étude par carottages d'une structure mise en évidence en sondage de vase dans le Lac Léman [Core study of a sedimentological structure discovered by mud probing in Lake Geneva (with English abs.)]: Sed. Geology, v. 2, no. 4, p. 257-261, illus., 1968.

266-485 **Serson, P. H.; Hannaford, W.; Haines, G. V.** Magnetic anomalies over Iceland: Science, v. 162, no. 3851, p. 355-357, illus., 1968.

269-441 **Serughetti, Jean; Roche, Alexandre.** Étude paléomagnétique de laves de l'île de Flores [Paleomagnetic study of lavas from Flores Island]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 21, p. 1185-1188, illus., 1968.

Seryakov, M. M. See *Gorodnitskiy, A. M. 273-202*

Seryapin, N. M. See *Levin, G. Ye. 266-191*

Serykh, V. I. See *Orlov, I. V. 269-085*

274-146 **Seth, M. S.; Gray, K. E.** Transient stresses and displacement around a wellbore due to fluid flow in transversely isotropic porous media—[Pt.] 1, Infinite reservoirs; [Pt.] 2, Finite reservoirs: Soc. Petroleum Engineers A.I.M.E. Trans., v. 243 (pt. 2), p. 63-68, illus., reprinted 1969; originally published 1968.

271-247 **Setunskaya, L. Ye.; Chuklenkova, I. N.** Neotektonicheskiye dvizheniya Vyatsko-Kamskoy oblasti i ikh znacheniye dlya analiza geologicheskikh struktur [Neotectonic movements of the Vyatsk-Kama region and their significance for the analysis of geologic structures], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 174-179, illus., 1968.

Seufert, Wilfried. See *Dorrer, Egon. 273-280*

Seward, F. A., Jr. See *Lee, Dang Hoon. 267-168*

Seward, F. A., Jr. See *Kim, Chulmin. 274-185*

271-288 **Seya, Kiyoshi.** On time variations of gravity in the period of the Matsushiro earthquake swarm [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 19, no. 9, p. 581-596, illus., table, 1968.

271-185 **Seyfert, Carl K.** Undeformed sediments in oceanic trenches with sea floor spreading: Nature, v. 222, no. 5188, p. 70, illus., 1969.

Seyfullin, R. S. See *Karasev, A. P. 270-149*

Shaaban, M. See *Sabry Youssef, M. 270-126*

Shabanov, S. F. See *Ter-Karapetyants, Zh. N. 274-282*

Shabanova, L. A. See *Aleksandrov, K. S. 265-208*

Shabanskiy, V. P. See *Antonova, A. Ye. 273-362*

Shablinskaya, N. V. See *Nalivkin, V. D. 269-269*

Shablinskaya, N. V. See *Klushin, I. G. 273-271*

272-005 **Shacklette, Hansford T.; Rubin, Meyer.** Radiocarbon dating of ash deposits on Amchitka Island, Alaska, *in* Geological Survey research 1969, Chap. B: U.S. Geol. Survey Prof. Paper 650-B, p. B81-B83, illus., 1969.

267-029 **Shafiqullah, M.; Folinsbee, R. E.; Baadsgaard, H.; Cumming, G. L.; Lerbekmo, J. F.** Geochronology of Cretaceous-Tertiary boundary, Alberta, Canada, *in* Cretaceous-Tertiary boundary including volcanic activity—Internat. Geol. Cong., 22d, India, 1964, Rept., Pt. 3, Proc. Sec. 3: Calcutta, India, Internat. Geol. Cong. Organising Comm., p. 1-20, illus., tables, 1964.

269-071 **Shafiqullah, M.; Folinsbee, R. E.; Baadsgaard, H.; Cumming, G. L.; Lerbekmo, J. F.** Geochronology of Cretaceous-Tertiary boundary, Alberta, Canada, *in* Internat. Geol. Cong., 22d, New Delhi, 1964, Proc., Sec. 3, Cretaceous-Tertiary boundary including volcanic activity: Calcutta, India, Internat. Geol. Cong. Organising Comm., p. 1-20, illus., tables, 1964.

270-024 **Shafiqullah, M.; Tupper, W. M.** K-Ar ages on rocks from the crater at Brent, Ontario: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 148-152, illus., tables, 1969.

Shagam, R. See *Hargraves, R. B. 271-362*

273-163 **Shaginyan, S. G.** Issledovaniye modeli otseka krupnoblochnogo trekhetazhnogo doma na seysmovzryvnyye vozdeystviya [Investigation of a model of a compartment of a concrete block three-story house under explosion-seismic action], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 118-128, illus., table, 1968.

Shahidi, Mohammed. See *Ambraseys, N. N. 267-113*

Shakhova, V. I. See *Podshibyakin, A. K. 266-440*

265-244 **Shakhsuvarov, D. N.; Zvereva, Ye. V.** Nekotoryye rezul'taty raschetov asimptotiki elektromagnitnykh poley pogruzhennykh istochnikov [Some results of calculations of the asymptote of the electromagnetic field of buried sources]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 71-80, illus., table, 1968.

Shakhsuvaryan, L. V. See *Oganesyan, N. L. 273-160*

Shalayev, S. V. See *Dyadyura, V. A. 271-296*

Shamkova, V. B. See *Aleksandrova, K. S. 275-441*

275-455 **Shamkova, V. B.; Saubanova, S. G.** Vydeleniye kollektorov v karbonatnom razreze i otsenka kharakter ikh nasyshchennosti s pomoshch'yuEVM [Bringing out reservoirs in a carbonate section and estimating the nature of their saturation using computers (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 78-83, 1969.

Shamotko, V. I. See *Sapuzhak, Ya. S. 266-228*

Shamsiyev, A. A. See *Kuliyev, A. K. 268-589*

Shanidze, A. I. See *Shoniya, N. F. 275-439*

265-060 **Shanin, L. L.; Arakelyants, M. M.; Chernyshev, I. V.** Opredeleniye radiogennogo argona metodom izotopnogo razbavleniya [Determination of radiogenic argon by the isotope dilution method], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 46-56, illus., 1967.

Shanin, L. L. See *Chernyshev, I. V. 265-068*

267-041 **Shanin, L. L.; Ivanov, I. B.; Shipulin, F. K.** O vozmozhnosti ispol'zovaniya alunita v K-Ar geokhronometrii [On the possibility of using alunite in K-Ar geochronometry]: Geokhimiya, no. 1, p. 109-111, illus., table, 1968.

Shanin, L. L. See *Arakelyants, M. M. 272-034*

Shanin, L. L. See *Vinogradov, V. I. 272-284*

Shanin, L. L. See *Tougarinov, A. I. 273-016*

275-281 **Shanin, L. L.; Shereshevskiy, A. M.; Vinogradov, V. I.** Ispol'zovaniye mass-spektrometra MI-1309 dlya izmereniye malykh variatsiy isotopnogo sostava sery [Use of the MI-1309 mass spectrometer for measuring small variations in the isotopic composition of sulfur], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 38-45, illus., tables, 1967.

268-096 **Shapiro, A.; Uliana, E. A.; Yaplee, B. S.; Knowles, S. H.** Lunar radius from radar measurements, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 34-46, illus., 1968.

Shapiro, B. S. See *Shashun'kina, V. M. 274-341*

Shapiro, Irwin I. See *Smith, William B. 268-095*

271-305 **Shapiro, J. N.; Knopoff, Leon.** Reduction of shock-wave equations of state to isothermal equations of state: Jour. Geophys. Research, v. 74, no. 6, p. 1435-1438, tables, 1969.

Shapiro, J. N. See *Knopoff, Leon. 271-306*

272-305 **Shapiro, Ralph.** Semiannual variation of geomagnetic disturbance and its modulation of shorter period variations: Jour. Geophys. Research, v. 74, no. 9, p. 2356-2367, illus., tables, 1969.

Shapiro, V. A. See *Ivanov, N. A. 269-446*

275-340 **Shapiro, V. A.; Ivanov, N. A.** Kharakteristiki dinamicheskoy namagnichennosti, sozdavayemoy udarami v obraztsakh yestestvennykh ferromagnetikov [Characteristics of dynamic magnetization created by shocks in samples of natural ferromagnetics]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 50-60, illus., table, 1969.

264-408 **Shapoval, V. I.; Makuvchuk, O. F.; Poznanskaya, N. F.** Primeneniye magnitnoy separatsii pri interpretatsii magnitnykh svoystv gornykh porod (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 23, p. 74-79, illus., tables, 1968.

269-702 **Sharifkulov, K. S.; Murashov, V. I.; Yagudin, S. Z.** O vydelenii kollektorov v karbonatnom razreze metodami promyslovoy geofiziki pri izmenenii udel'nogo elektricheskogo soprotivleniya burovogo rastvora [On bringing out reservoirs in a carbonate section by geophysical logging methods by changing the specific electrical resistivity of the drilling mud]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 30-32, illus., 1968.

Sharina, K. V. See *Byakov, Yu. A. 265-651*

Sharlovskaya, L. A. See *Agul'nik, I. M. 264-275*

266-462 **Sharma, P. Vallabh.** Choice of configuration for measurement of magnetic moment of a rock specimen with a fluxgate unit: Geoexploration, v. 6, no. 2, p. 101-108, illus., 1968.

273-392 **Sharma, P. Vallabh.** Nomograms for approximating the magnetic effects of thin platelike bodies: Geoexploration, v. 7, no. 1, p. 29-43, illus., table, 1969.

265-375 **Sharma, S. K.; Sharma, T.** O-18/O-16 and C-13/C-12 ratios of some natural carbonates: Geol. Soc. India Bull., v. 5, no. 2, p. 53-55, table, 1968.

266-574 **Sharovarin, V. D.; Dakhkil'gov, T. D.** Opredeleniye neftenasyshchennosti nizhnemelovykh kollektorov Prikumskogo neftegazonosnogo rayona po rezul'tatam elektricheskogo karotazha [Determination of the oil saturation of the Lower Cretaceous reservoirs in the Kuma oil and gas district from the results of electrical logging]: Vyssh. Ucheb. Zavedeniy Izv., Neft' i Gaz, no. 5, p. 3-6, illus., 1968.

275-082 **Sharp, Alan.** The Moon's mysterious mascons: New Scientist, v. 41, no. 642, p. 679-681, illus., 1969.

271-309 **Sharp, W. E.** Melting curves of sphalerite, galena, and pyrrhotite and the decomposition curve of pyrite between 30 and 65 kilobars: Jour. Geophys. Research, v. 74, no. 6, p. 1645-1652, illus., 1969.

264-381 **Shashun'kina, V. M.** Ionospheric effect of the sudden commencement of a magnetic storm in years of maximum and minimum solar activity: Geomagnetism and Aeronomy, v. 8, no. 1, p. 149-151, illus., 1968.

267-424 **Shashun'kina, V. M.** Variations in ionospheric parameters during the effect of an SC as a function of solar and magnetic activity, according to data from Lindau: Geomagnetism and Aeronomy, v. 8, no. 2, p. 283-284, illus., table, 1968.

274-341 **Shashun'kina, V. M.; Shapiro, B. S.** Influence of aeronomic parameters on the ionospheric effect of an SC magnetic storm: Geomagnetism and Aeronomy, v. 8, no. 6, p. 899-901, illus., table, 1968.

267-026 **Shata, A.; Knetsch, G.; Degens, E. T.; Munnich, O.; El-Shalzli, M.** The geology, origin, and age of the ground-water supplies in some desert areas of U.A.R.: Inst. Desert Egypte Bull., v. 12, no. 2, p. 61-124, illus., tables, 1967.

Shaub, Yu. B. See *Lyubavin, L. M. 264-178*

265-255 **Shaub, Yu. B.; Shurkin, Yu. F.** Modelirovaniye inertsionnykh iskazheniy aerogeofizicheskikh anomaliy [Modeling inertial distortions of aerogeophysical anomalies]: Geofiz. Apparatura, no. 27, p. 43-50, illus., 1966.

266-219 **Shaub, Yu. B.** Otsenka vozmozhnostey geologicheskogo kartirovaniya aeroelektrorazvedkoy metodom induktsii zakrytykh territoriy [Appraisal of the possibilities of geologic mapping by the airborne electrical survey method of induction in covered territories]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 94-97, illus., 1968.

267-179 **Shaub, Yu. B.** Ob ispol'zovanii fazovykh anomaliy v metode radiokip [On the use of phase anomalies in the "radiokip" method]: Geofiz. Apparatura, no. 34, p. 111-119, illus., 1967.

270-141 **Shaub, Yu. B.; Nikonov, B. L.** Apparatura dlya issledovaniya effektov nelineynoy elektroprovodimosti [Apparatus for investigating the effects of nonlinear electrical conductivity]: Geofiz. Apparatura, no. 35, p. 99-103, illus., 1968.

271-134 **Shaub, Yu. B.** Opredeleniye parametrov dvukhsloynoy sredy aeroelektrorazvedkoy metodom beskonechno dlinnogo kabelya [Determination of the parameters of a two-layered medium by airborne electrical surveying by the infinitely long cable method]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 106-109, illus., 1968.

271-136 **Shaub, Yu. B.** Ob izmeryayemykh parametrakh i ikh interpretatsii v aeroelektrorazvedke metodom radiokip [On the measurable parameters and their interpretation in ariborne electrical surveying by the "radiokip" method]: Geofiz. Apparatura, no. 31, p. 64-73, illus., 1967.

273-191 **Shaub, Yu. B.** Ob ispol'zovanii effektov nelineynoy elektroprovodnosti pri obnaruzhenii vkraplennykh sul'fidnykh rud [On the use of the effects of nonlinear electrical conductivity in detecting disseminated sulfide ores]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 89-94, illus., 1969.

273-194 **Shaub, Yu. B.** Zamechaniya po povodu stat'i G. S. Frantova "Opredeleniye moshchnosti sloya nanosov po rezul'tatam aeroelektromagnitnykh nablyudeniy" (Fizika Zemli, no. 3, 1968) [Remarks apropos of the paper by G. S. Frantov, "Determination of the thickness of alluvium on the basis of results of airborne electromagnetic observations (Fiziki Zemli, no. 3, 1968)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 111, 1969.

275-152 **Shaub, Yu. B.** Ob opredelenii solenosti morskoy vody induktsionnymi metodami s vozdukha [On the determination of the salinity of sea water by induction methods from the air]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 81-84, illus., 1969.

274-281 **Shavlo, S. G.; Stashkov, G. M.; Tsoy, A. V.; Volkov, Yu. A.; Gadayev, A. Ya.** Vply temperaturnykh umov na efekt termolyumīnestsentsīyi u kalīyevykh pol'ovykh shpatīv [Influence of temperature conditions on the thermoluminescence effect in potassium feldspars (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 1, p. 13-15, tables, 1969.

Shaydenko, A. Ya. See *Vlasenkov, V. M. 270-221*

Shchelov, V. I. See *Karatayev, G. I. 266-330*

264-382 **Shchepetnov, P. V.; Kalisher, A. L.** Some correlations of the interval of pulsations of decreasing period on February 12, 1964: Geomagnetism and Aeronomy, v. 8, no. 1, p. 151-153, illus., 1968.

Shchepetnov, R. V. See *Troitskaya, V. A. 271-355*

Shchepetnov, R. V. See *Troitskaya, V. A. 272-350*

264-502 **Shcherbakov, V. V.** Sostavleniye strukturnykh kart, minuya postroyeniye seysmicheskikh razrezov [Plotting structure maps without constructing seismic sections]: Razved. Geofizika, no. 23, p. 19-20, 1967.

270-242 **Shcherbakov, Yu. G.** K raschetu sostava glubinnykh zon Zemli [On the calculation of the composition of the deep zones of the Earth]: Akad. Nauk SSSR Doklady, v. 183, no. 6, p. 1424-1426, table, 1968.

Shcherbo, M. N. See *Vasil'yev, Yu. I. 273-145*

265-055 **Shchigolev, N. D.** Obshchiye printsipy metoda izotopnogo razbavleniya [General principles of the isotope-dilution method], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 10-15, 1967.

265-070 **Shchigolev, N. D.** Metod poverkhnostnoy ionizatsii pri izotopnom analize [Surface ionization method of isotopic analysis], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 156-163, 1967.

271-055 **Shebalin, N.** Se puede conjurar el terremoto, El pronostico no basta [Is it possible to prevent an earthquake, Prediction is not enough]: Chile Univ. Bol., no. 73, p. 43-45, 1967.

264-141 **Shebalin, N. V.** Zapisi oshchutimykh zemletryaseniy 1964 g. [Records of felt earthquakes in 1964], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 192-211, illus., table, 1967.

266-144 **Shebalin, N. V.** K voprosu o prirode glubokikh zemletryaseniy [On the problem of the nature of deep earthquakes]: Akad. Nauk SSSR Doklady, v. 181, no. 5, p. 1119-1122, illus., table, 1968.

Shebalin, N. V. See *Morozova, R. N. 270-085*

Shechkov, B. N. See *Karatayev, G. I. 266-395*

Shechkov, B. N. See *Savarenskiy, Ye. F. 274-290*

Shedlovsky, J. P. See *Cadle, R. D. 274-461*

Shekhvatov, B. V. See *Sagalevich, A. M. 274-439*

Shelegova, I. F. See *Amurskiy, G. I. 273-467*

265-328 **Shempelev, A. G.** Paletka dlya vvedeniya popravki za rel'yef gravimetricheskogo s''yemkakh [Master curve for introducing the terrain correction in gravimetric surveys]: Razved. Geofizika, no. 24, p. 34-39, illus., 1967.

Shemyakin, M. L. See *Romanenko, Yu. A. 267-276*

270-176 **Shemyakin, M. L.; Romanenko, Yu. A.** Algoritm preobrazovaniya na ETsVM znacheniy izoliniy i koordinat ikh tochek znacheniya funktsii v uzlakh pryamougol'noy ravnomernoy setki [Algorithm for computer conversion of values of isolines and the coordinates of their points into values of the functions at the intersections of a rectangular uniform grid (with English summ., p. 164)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 8, p. 119-121, 1968.

271-104 **Shenderovich, I. M.** Sovremennyye instrumental'nyye sredstva izucheniya tsunami [Modern instrumental means of studying tsunami], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 198-206, illus., 1968.

Shengelaya, G. Sh. See *Balavadze, B. K. 266-354*

Shengelaya, G. Sh. See *Balavadze, B. K. 268-347*

270-224 **Shengelaya, G. Sh.** Stroyeniye zemnoy kory v zapadnoy chasti basseyna r. Kury (Rezul'taty gravimetricheskikh issledovaniy) [Crustal structure in the western part of the Kura River basin (Results of gravimetric investigations)]: Tbilisi, Izdatel'stvo "Metsniyereba," 178 p., illus., tables, 1968.

Shepard, Francis P. See *Rees, Anthony I. 267-436*

267-606 **Shepard, Francis P.; Buffington, Edwin C.** La Jolla submarine fan-valley: Marine Geology, v. 6, no. 2, p. 107-143, illus., table, 1968.

269-674 **Shepard, Francis P.; Dill, Robert F.; Heezen, Bruce C.** Diapiric intrusions in foreset slope sediments off Magdalena Delta, Colombia: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 11, p. 2197-2207, illus., 1968.

269-682 **Shepard, Francis P.** Submarine canyon origin—Based on deep-diving vehicle and surface ship operations [with French abs.]: Rev. Géographie Phys. et Géologie Dynam., ser. 2, v. 9, no. 5, p. 347-356, illus., 1967.

Shepard, Frank. See *Fox, Paul J. 275-199*

273-337 **Shepherd, Donald C.; Ecklund, Warner L.** Auroral absorption occurrence patterns as a function of magnetic activity: Jour. Geophys. Research, v. 74, no. 11, p. 2891-2898, illus., 1969.

268-545 **Shepherd, Frederick G.** Aplicación de la sismología combinada con la geología de subsuelo en la interpretación de fallas en el noreste de Mexico [Application of seismology in combination with subsurface geology to interpretation of faults in northeastern Mexico]: Asoc. Mexicana Geofísicos Explor. Bol., v. 8, no. 4, p. 203-223, illus., 1967.

274-101 **Shepherd, J. B.** Comment on a paper by J. D. Eisler, "Investigation of a method for determining stress accumulation at depth" (1967): Seismol. Soc. America Bull., v. 59, no. 2, p. 1009-1011, 1969.

270-416 **Shepherd, R.; Donald, R. A. H.** Foundation deformation effects in structural dynamic analysis, *in* Australia-New Zealand Conf. on Soil Mechanics and Found. Eng., 5th, Auckland, New Zealand, 1967, Proc.: Petone, New Zealand, Sigma Press, Ltd., p. 205-212, illus., tables, 1967.

Shepherd, R. See *Walpole, W. R. 274-095*

Sheppard, Robert M. See *Greenfield, Roy J. 272-254*

Sheremet, O. G. See *Aue, L. F. 274-249*

Sheremeta, O. O. See *Ostistyy, B. K. 275-177*

Shereshevskiy, A. M. See *Shanin, L. L. 275-281*

272-296 **Shergina, Yu. P.; Shkorbatov, S. S.; Kaminskaya, A. B.** K voprosu o svyazi izotopnogo sostava bora intruziy bazitov i giperbazitov s magmaticheskim ochagom [On the problem of the relationship of the isotopic composition of boron in mafic and ultramafic intrusions to the magma reservoir]: Geokhimiya, no. 9, p. 1136-1139, tables, 1968.

274-417 **Sheridan, R. E.; Houtz, R. E.; Drake, Charles L.; Ewing, Maurice.** Structure of continental margin off Sierra Leone, West Africa: Jour. Geophys. Research, v. 74, no. 10, p. 2512-2530, illus., 1969.

268-576 **Sherif, M. A.; Wu, M. J.; Awad, I. S.** The effect of overconsolidation on the magnitude of lateral stresses in soils, *in* Engineering geology and soils engineering symposium, 6th Ann., Boise, Idaho, 1968, Proc.: Boise, Idaho Dept. Highways, p. 45-63, illus., table, 1968.

274-219 **Sheriff, R. E.** Addendum to glossary of terms used in geophysical exploration: Geophysics, v. 34, no. 2, p. 255-270, illus., 1969.

275-443 **Sherman, G. Kh.; Eydman, I. Ye.** Klassifikatsiya kollektorov pri pomoshchi EVM kak variant kompleksnoy interpretatsii karotazhnykh materialov [Classification of reservoirs using computers as a variant of collective interpretation of logging data]: Geologiya Nefti i Gaza, no. 4, p. 53-56, illus., tables, 1969.

Sherman, John W., 3d. See *Zaitzeff, James B. 270-108*

Sherman, M. L. See *Dashkevich, N. N. 269-340*

Sherman, S. I. See *Komarov, Yu. V. 271-221*

Shermyakov, N. F. See *Zvegintsev, A. G. 274-368*

266-467 **Sherwood, J.; Watt, J. H.** The use of a portable fluxgate magnetometer for the estimation in the field of the direction and stability of remanent magnetization of rock specimens: Pure and Appl. Geophysics, v. 70, no. 2, p. 88-93, illus., 1968.

Shestakov, L. I. See *Blankov, Ye. B. 272-563*

268-533 **Shestakov, V. V.** Nekotoryye uzly portativnoy radiometricheskoy apparatury [Some units of portable radiometric apparatus], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 101-104, illus., 1967.

268-651 **Shestakov, V. V.** Vliyaniye nekotorykh faktorov na rezul'taty fotoneytronnogo karotazha burovzryvnykh skvazhin [Effect of some factors on the results of photoneutron logging of shot wells], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 37-47, illus., 1967.

Shevchenko, I. N. See *Litvinov, V. V. 264-283*

269-638 **Shevchenko, L. B.; Mushin, I. A.** O kriteriyakh vydeleniya poverkhnosti fundamenta po materialam MRNP [On criteria for bringing out the basement surface on the basis of data of the controlled-direction pickup procedure]: Razved. Geofizika, no. 26, p. 14-23, illus., 1968.

273-111 **Shevchenko, V. V.** Problemy obitayemoy bazy na Lune (po stranitsam zarubezhnoy pechati) [Problems of a manned base on the Moon (according to the pages of the foreign press)]: Akad. Nauk SSSR Vestnik, no. 6, p. 95-194, illus., 1968.

Shevnin, A. D. See *Fel'dshteyn, Ya. I. 265-402*

265-265 **Sheynmann, S. M.** Ob elektricheskikh svoystvakh porod verkhnikh sloyev zemnoy kory—Pogranichnyye uravneniya [On the electrical properties of the rocks of the upper layers of the Earth's crust—Boundary equations]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 53-61, 1968.

265-291 **Sheynmann, Yu. M.** Magma and tectonic processes of depths: Tectonophysics, v. 5, no. 5, p. 427-439, illus., 1968.

266-323 **Sheynmann, Yu. M.** Ob odnoy osobennosti sredinnykh okeanicheskikh khrebtov [On a feature of mid-ocean ridges]: Geotektonika, no. 4, p. 106-108, illus., 1965.

267-233 **Sheynmann, Yu. M.** Tektonika glubin Zemli [Tectonics of the depths of the Earth]: Priroda, no. 3, p. 68-74, illus., 1968.

268-319 **Sheynmann, Yu. M.** Tectonics of the upper parts of the mantle under geosynclines and island arcs, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 466-472, illus., 1968.

271-199 **Sheynmann, Yu. M.** Ocherki glubinnoy geologii (svyazi tektoniki s vozniknoveniyem magm) [Features of deep geology (relationship of tectonics to the formation of magmas)]: Moscow, Izdatel'stvo "Nedra," 231 p., illus., tables, 1968.

275-267 **Sheynmann, Yu. M.** Vozmozhnyye svyazi magm so stroyeniyem vneshnikh obolochek Zemli [Possible relationship of magmas to the structure of the outer shells of the Earth], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 63-74, illus., 1964.

Shi, Yun-Yuan. See *Eckstein, Martin C. 274-258*

Shibano, Mutsuro. See *Kawasumi, Hirosi. 264-120*

Shibano, Mutsuro. See *Kasahara, Keichi. 266-134*

266-137 **Shibano, Mutsuro; Sasaki, Koichi; Matsumoto, Shigeo.** A seismo-counter [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 697-705, illus., 1968.

Shibano, Mutsuro. See *Kasahara, Keichi. 266-138*

269-074 **Shibata, Ken; Hayama, Yoshikazu.** K-Ar ages of the Ryoke metamorphic rocks of the Komagane district, Nagano Prefecture, central Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 213-218, illus., table, 1968.

269-075 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar age of Ominesan acid rocks, Kishu, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 219-222, illus., table, 1968.

269-076 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar ages of granitic rocks of Ashizuri-misaki, Takatsukiyama and Omogo, Shikoku, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 223-228, illus., table, 1968.

269-077 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar ages of Osuzuyama acid rocks, Kyushu, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 229-232, illus., table, 1968.

269-078 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar ages of acid rocks of Noma-misaki and Hioki Mountains, Kyushu, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 233-236, illus., table, 1968.

269-079 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar ages of Yakujima granite, Kyushu, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 237-241, illus., table, 1968.

269-080 **Shibata, Ken; Nozawa, Tamotsu.** K-Ar age of Omi schist, Hida Mountains, Japan [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 243-246, illus., table, 1968.

269-081 **Shibata, Ken; Ishihara, Shunso.** K-Ar ages on biotite from Questa Mine area, New Mexico, U. S. A. [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 4, p. 247-250, illus., tables, 1968.

271-032 **Shibata, Ken; Konishi, Kenji; Nozawa, Tamotsu.** K-Ar age of muscovite from the crystalline schist of the northern Ishigaki-shima, Ryukyu Islands [with Japanese abs.]: Japan Geol. Survey Bull., v. 19, no. 8, p. 529-533, illus., table, 1968.

272-283 **Shieh, Y. N.; Taylor, H. P., Jr.** Oxygen and hydrogen isotope studies of contact metamorphism in the Santa Rosa Range, Nevada, and other areas: Contr. Mineralogy and Petrology, v. 20, no. 4, p. 306-356, illus., tables, 1969.

Shikhman, M. S. See *Bragin, A. A. 266-573*

264-262 **Shikhov, S. A.** Opredeleniya elementov zaleganiya vertikal'nogo i naklonnogo ustupov [Determination of the positional elements of vertical and inclined steps]: Razved. Geofizika, no. 23, p. 71-74, illus., 1967.

265-329 **Shikhov, S. A.** Kartirovaniye po anomaliyam sily tyazhesti otvetvleniy Kamsko-Kinel'skoy sistemy progibov [Mapping the limbs of the Kama-Kinel system of downwarps on the basis of gravity anomalies]: Razved. Geofizika, no. 24, p. 40-45, illus., 1967.

Shilin, A. I. See *Nenashev, N. I. 274-025*

270-121 **Shilin, B. V.; Komarov, V. B.** Application of infrared aerial recording techniques to studies of volcanoes and thermal activities of Kamchatka Peninsula, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., supp., 8 p., illus., 1968.

Shilov, V. A. See *Kantorivich, V. L. 271-392*

Shilova, A. A. See *Byakov, Yu. A. 265-651*

Shilova, A. M. See *Bondarenko, A. P. 266-232*

Shima, Etsuzo. See *Asada, Toshi. 264-116*

266-139 **Shima, Etsuzo; Ohta, Yutaka; Yanagisawa, Masumi; Allam, Ahmed.** S wave velocities of subsoil layers in Tokyo, [Pt.] 2 [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 759-772, illus., table, 1968.

266-512 **Shima, Etsuzo; Yanagisawa, Masumi; Allam, Ahmed.** Experimental study on generation and propagation of S-waves—[Pt.] 4, S-wave prospecting by means of well shooting [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v 46, pt. 3, p. 517-528, illus., 1968.

Shima, Etsuzo. See *Hashizume, Michio. 272-269*

274-022 **Shima, Makoto; Okada, Akihiko; Yabuki, Hideo.** On the cross-checking of fission track method and K-Ar method for age dating [in Japanese with English abs.]: Japanese Assoc. Mineralogists, Petrologists and Econ. Geologists Jour., v. 61, no. 3, p. 100-105, illus., table, 1969.

275-048 **Shima, Makoto; Yabuki, Hideo.** Study on the extraterrestrial material at Antarctica, [Pt.] 1 [in Japanese with English abs.]: Antarctic Rec., no. 33, p. 53-64, illus., tables, 1968.

275-049 **Shima, Makoto; Yabuki, Hideo; Okada, Akihiko.** Study on the extraterrestrial material in Antarctica—[Pt.] 2, Seasonal variation at Syowa Station and latitude effect on cosmic dust [in Japanese with English abs.]: Antarctic Rec., no. 34, p. 1-13, illus., tables, 1969.

269-433 **Shimada, M.; Kume, S.; Koizumi, M.** Demagnetization of unstable remanent magnetization by application of pressure: Royal Astron. Soc. Geophys. Jour., v. 16, no. 4, p. 369-373, illus., tables, 1968.

Shimada, Masahiko. See *Sasajima, Sadao. 268-394*

Shimada, Masahiko. See *Sasajima, Sadao. 270-275*

265-363 **Shimada, Mitsuhiko.** An experimental study of the basalt-eclogite transition: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 211-217, illus., tables, 1967.

273-402 **Shimarayev, V. N.** O vychislenii nizhney kromki vertikal'nogo namagnichennogo plasta [On the calculation of the lower boundary of a vertical magnetized layer], *in* Geofizicheskiye metody razvedki v Arktike 5sbornik statey), No. 5: Leningrad, Nauchno-Issled. Inst. Geologii Arktiki, p. 244-248, illus., 1968.

266-389 **Shimazu, Yasuo; Iriyama, Jun; Urabe, Tatsuo.** Unsteady mantle convection: Nagoya Univ. Jour. Earth Sci., v. 15, no. 1, p. 81-98, illus., table, 1967.

Shimelevich, Yu. S. See *Savosin, S. I. 272-480*

272-561 **Shimelevich, Yu. S.; Popov, N. V.; Gorbunov, V. F.** ryye voprosy vremennogo raspredeleniya gamma-izlucheniya, voznikayushchego pri obluchenii gornykh porod bystrymi neytronami [Some problems of the temporal distribution of gamma radiation arising upon irradiation of rocks by fast neutrons], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 176-182, illus., 1968.

Shimelevich, Yu. S. See *Blankov, Ye. B. 272-563*

Shimizu, N. See *Ozima, M. 268-027*

273-384 **Shimizu, Yoshio.** A palaeomagnetic study of the Pliocene sediments in the Miura Peninsula [in Japanese with English abs.]: Meiji Univ. Fac. Eng. Research Repts., no. 22, p. 1-22, illus., tables, 1967.

273-385 **Shimizu, Yoshio.** A preliminary note on a palaeomagnetic study of the Pliocene sediments in the Tama Hills [in Japanese with English abs.]: Meiji Univ. Fac. Eng. Research Repts., no. 22, p. 23-25, illus., table, 1967.

270-447 **Shimozuru, Daisuke.** Discussion on the energy partition of volcanic eruption: Bull. Volcanol., v. 32, no. 2, p. 383-394, illus., tables, 1968.

Shimozuru, Daisuke. See *Minakami, Takeshi. 271-562*

Shipilov, L. D. See *Anan'yev, F. M. 264-319*

Shipulin, F. K. See *Shanin, L. L. 267-041*

275-283 **Shipulin, F. K.; Vinogradov, V. I.** Ob izotopakh sery v rudakh Dashkesana [On the isotopes of the sulfur in the Dashkesan ores], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 59-71, illus., 1967.

Shirley, F. R. See *Fischer, Irene. 271-168*

Shirokov, V. Ya. See *Budnikov, N. P. 275-193*

Shirokova, E. I. See *Balakina, L. M. 275-108*

Shirokova, Ye. I. See *Balakina, L. M. 266-146*

272-570 **Shishakin, O. V.** Zavisimost' rezul'tatov fotoneytronnykh izmereniy na berilliy v meste zaleganiya rud ot fizicheskikh svoystv rud i nekotorykh usloviy izmereniy [Dependence of the results of photoneutron measurements on beryllium in ores in place on the physical properties of the ores and some conditions of measurement], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 279-286, illus., 1968.

Shitov, N. A. See *Pelyushenko, V. M. 266-225*

268-395 **Shive, Peter N.** Destruction of thermoremanence in nickel by deformation: Nature, v. 220, no. 5174, p. 1314-1315, illus., 1968.

275-327 **Shive, Peter N.** The effect of internal stress on the thermoremanence of nickel: Jour. Geophys. Research, v. 74, no. 15, p. 3781-3788, illus., 1969.

Shkadinskaya, G. V. See *Levshin, A. L. 266-199*

Shkadinskaya, G. V. See *Levshin, A. L. 273-150*

Shkol'nikov, A. S. See *Bespalov, D. F. 272-554*

Shkorbatov, S. S. See *Shergina, Yu. P. 272-296*

270-420 **Shkurina, K. P.** Zavisimost' vremennoy deformatsii gornykh porod ot ikh treshchinovatosti [Dependence of the temporal deformation of rocks on their jointing], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze: Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 32-40, illus., tables, 1967.

Shkurko, M. D. See *Korsakov, O. D. 269-650*

Shleyfer, M. S. See *Namestnikov, Yu. G. 265-467*

264-376 **Shlyakhtina, A. P.; Privalova, L. A.; Medvedeva, T. Ye.** Map of the geomagnetic field intensity T for the 1965 epoch: Geomagnetism and Aeronomy, v. 8, no. 1, p. 101-107, illus., 1968.

Shlychkin, P. D. See *Garris, M. A. 267-051*

269-235 **Shlychkin, P. D.** Plotnostnaya, skorostnaya i magnitnaya kharakteristika kristallicheskikh porod, vskrytykh glubokim bureniyem na yugo-vostoke Tatarskogo svod [Density, velocity, and magnetic characteristics of the crystalline rocks penetrated by deep drilling in the southeastern Tatar arch (with English summ.)], *in* Interna Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiy Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 169-173, illus table, 1968.

275-286 **Shlyukova, Z. V.; Borutskiy, B. Ye.; Sokolova, M. H.; Vinogradov, V. I.** O izotopnom sostave sery v mineralakh Khibinskogo massiva nefelinovykh siyenito

[On the isotopic composition of the sulfur in minerals from the Khibin nepheline-syenite massif], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka), p. 106-109, table, 1967.

Shmakov, V. N. See *Demen'tyev, G. Ya. 269-632*

Shmekker, M. S. See *Chutko, Ye. B. 264-593*

Shmekker, M. S. See *Chutko, Ye. B. 264-594*

Shmekker, M. S. See *Karpinskaya, N. N. 264-595*

Shmekker, M. Sh. See *Karpinskaya, N. N. 264-590*

Shmekker, M. Sh. See *Karpinskaya, N. N. 264-597*

272-373 **Shmeleva, A. N.** Paleomagnetic study of some Upper Cretaceous sections in the western foothills of the Gerghana Range [translated from Russian, *in* Paleomagnitnyye stratigraficheskiye issledovaniya, No. 204: Leningrad., Gostoptekhizdat, p. 212-219, 1963]: Canada Defense Board Directorate Sci. Inf. Services [Rept.] T477R, 11 p., illus., tables, 1967.

269-468 **Shneyer, V. S.; Fonarev, G. A.** Some results of observations of magnetic variations at the surface and bottom of the ocean: Geomagnetism and Aeronomy, v. 8, no. 3, p. 479-480, illus., 1968.

Shneyerson, M. B. See *Blokhin, P. A. 269-637*

Shneyerson, M. V. See *Solukvadze, G. M. 269-642*

268-078 **Shoemaker, E. M.; Batson, R. M.; Holt, H. E.; Morris, E. C.; Rennilson, J. J.; Whitaker, E. A.** Television observations from Surveyor VII, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 9-76, illus., 1968.

Shoemaker, E. M. See *Gault, D. E. 268-084*

275-071 **Shoemaker, E. M.; Morris, E. C.; Batson, R. M.; Holt, H. E.; Larson, K. B.; Montgomery, D. R.; Rennilson, J. J.; Whitaker, E. A.** Television observations from Surveyor, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 21-136, illus., 1969.

Shoemaker, E. M. See *Gault, D. E. 275-077*

Sholpo, L. Ye. See *Belokon', V. I. 273-386*

273-387 **Sholpo, L. Ye.; Mamedov, S. A.** Opredeleniye napravleniye pervichnoy namagnichennosti gornykh porod [Determination of the direction of the primary magnetization of rocks]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 95-102, illus., table, 1969.

273-388 **Sholpo, L. Ye.; Mamedov, S. A.** Metod opredeleniya khimicheskogo proiskhozhdeniya ostatochnoy namagnichennosti [A method of determining the chemical origin of remanent magnetization]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 101-105, illus., 1969.

274-248 **Sholpo, V. N.** Kolichestvennyye kriterii otsenki rezhima vertikal'nykh dvizheniy [Quantitative criteria for calculating the regime of vertical movements]: Geotektonika, no. 2, p. 38-51, illus., tables, 1969.

275-439 **Shoniya, N. F.; Shanidze, A. I.** Ob effektivnosti primeneniya elektrokarotazha pri razvedke Madneul'skogo medno-barito-polimetallicheskogo mestorozhdeniya (Gruzinskaya SSR) [On the effectiveness of the use of electrical logging in exploring the Madneul' copperubarite-polymetallic deposit (Georgian S.S.R.)]: Sovetskaya Geologiya, no. 2, p. 156-159, illus., 1969.

274-404 **Shopland, Robert C.; Kirklin, Richard L.** Application of strain seismographs to the discrimination of seismic waves: Seismol. Soc. America Bull., v. 59, no. 2, p. 673-689, illus., 1969.

Shor, George G., Jr. See *Normark, William R. 267-572*

Shornikov, S. I. See *Berzin, A. K. 272-485*

272-486 **Shornikov, S. I.** K voprosy o primenenii γ-aktivatsionnogo metoda dlya odnovremennogo opredeleniya soderzhaniya tsirkoniya i titana v kompleksnykh titanovo-tsirkoniyevykh rudakh [On the problem of using the gamma-activation method for simultaneous determination of the zirconium and titanium content in complex titano-zirconium ores], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 274-279, illus., tables, 1968.

273-069 **Short, N. M.; Bunch, T. E.** A worldwide inventory of features characteristic of rocks associated with presumed meteorite impact structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 255-266, illus., table, 1968.

267-084 **Short, Nicholas M.** A review of shock processes pertinent to fragmentation and lithification of the lunar terrain, *in* Interpretation of lunar probe data—AAS Specialist Symposium, Huntington Beach, Calif., 1966, Proc.: Tarzana, Calif., American Astronautical Soc. (Science and Technology Series, V. 14), p. 17-60, illus., tables, 1967.

Short, Nicholas M. See *French, Bevan M. 273-050*

273-065 **Short, Nicholas M.** Nuclear-explosion-induced microdeformation of rocks—An aid to the recognition of meteorite impact structures, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 185-210, illus., table, 1968.

273-067 **Short, Nicholas M.** Experimental microdeformation of rock materials by shock pressures from laboratory-scale impacts and explosions, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 219-241, illus., tables, 1968.

273-078 **Short, Nicholas M.** Petrographic study of shocked rocks from the Steen River structure, Alberta, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 374-378, illus., 1968.

Short, Nicholas M. See *Sclar, Charles B. 273-085*

271-145 **Shotskiy, I. I.; Ryabenko, V. A.** Pro heolohīchnu strukturu krystalīchnoho fundamentu baseynu r. Tetereva [On the geologic structure of the crystalline basement of the Teterev River basin (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 5, p. 408-412, illus., 1968.

265-011 **Shotton, F. W.; Blundell, D. J.; Williams, R. E. G.** Birmingham University radiocarbon dates II: Radiocarbon, v. 10, no. 2, p.00-206, 1968.

Shouten, J. A. See *Collette, B. J. 265-335*

273-313 **Shovkoplyas, V. M.; Morozov, G. V.** Termolyuminestsentsīya karbonatnykh konkretsīy z antropohenovykh vīdlkadīv Ukrayiny [Thermoluminescence of carbonate concretions from the Anthropogene formations of the Ukraine (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 3, p. 230-234, illus., 1969.

Shpil'kov, A. P. See *Indukayev, S. Ye. 267-570*

269-338 **Shraybman, V. I.** Sootnosheniye osnovnykh gravitiruyushchikh faktorov zapada Srednoy Azii [Relationships of the main gravitating factors of the western part of Central Asia (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 97-102, illus., tables, 1968.

Shraybman, V. I. See *Kholin, A. I. 273-220*

Shreyner, A. A. See *Verzhbitskiy, Ye. V. 269-473*

Shreyner, L. A. See *Baydyuk, B. V. 268-590*

Shreyner, L. A. See *Pavlova, N. N. 268-597*

Shreyner, L. A. See *Yakushev, V. P. 268-599*

269-671 **Shreyner, L. A.** (and others). Deformatsionnyye svoystva gornykh porod pri vysokikh davleniyakh i temperaturakh [Deformational properties of rocks at high pressures and temperatures]: Moscow, Izdatel'stvo "Nedra," 360 p., illus., tables, 1968.

Shrubsall, M. H. See *Runcorn, S. K. 266-082*

Shtekh, G. I. See *Mokshantsev, K. B. 266-397*

266-398 **Shtekh, G. I.** Stroyeniye zemnoy kory Verkhoyanskogo megantiklinoriya i prilegayushchey chasti Sibirskoy platformy [Crustal structure of the Verkhoyansk meganticlinorium and adjoining parts of the Siberian platform], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 9-31, illus., 1967.

270-397 **Shterengarts, Ye. M.; Petrov, Ye. N.; Smirnov, V. F.** Ustroystvo vvoda v vychislitel'nuyu mashinu Ural-3 seysmicheskoy informatsii s magnitnoy lenty [Device for feeding seismic information into a Ural-3 computer with magnetic tape]: Geofiz. Apparatura, no. 36, p. 125-129, illus., 1968.

267-586 **Shterengrats, Ye. M.; Sun-Shun-I; Sedin, A. M.** Avtomaticheskiy markirovshchik seysmogramm [Automatic seismogram marker]: Geofiz. Apparatura, no. 34, p. 136-142, illus., 1967.

Shteynberg, G. G. See *Blokhin, P. A. 269-637*

270-385 **Shteynberg, G. G.** Vyyavleniye kratnykh otrazhennykh voln na summolentakh MRNP [Manifestation of multiply reflected waves on summation tapes of the controlled-direction-pickup procedure]: Razved. Geofizika, no. 29, p. 17-23, illus., 1968.

266-156 **Shteynberg, V. V.** Issledovaniye spektrov blizkikh zemletryaseniy dlya prognoza seysmicheskogo vozdeystviya [Investigations of the spectrums of near earthquakes for predicting seismic action], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 123-150, illus., tables, 1967.

271-200 **Shtreys, N. A.** Problema svyazi magmatizma so strukturami geosinklinal'nykh sistem [The problem of the relationship of magmatism to the structures of geosynclinal systems (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, Izdatel'stvo "Nauka," p. 5-10, 1968.

Shugurova, N. A. See *Dolgov, Yu. A. 272-064*

Shukhmuratov, V. K. See *Bilalov, R. S. 267-199*

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267-368 **Shukolyukov, Yu. A.; Ashkinadze, G. Sh.; Levchenkov, O. A.; Ovchinnikova, G** V. Opredeleniye konstanty skorosti spontannogo deleniya U-238 po nakopleniy ksenona v mineralakh [Determination of the constants of the rate of spontaneous fis sion of U-238 from the accumulation of xenon in minerals (with English summ.)] Geokhimiya, no. 3, p. 265-274, illus., tables, 1968.

Shukolyukov, Yu. A. See *Gerling, E. K. 275-026*

Shukri, N. M. See *ElShazly, E. M. 268-528*

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Shumilov, O. I. See *Pudovkin, M. I. 275-313*

273-287 **Shumskiy, P. A.** Dvizheniye l'da v lednikakh pri ploskom napryazhenno-defo miruyemom sostoyanii [Ice movement in glaciers in the case of the plane stres deforming state], *in* Uspekhi sovetskoy glyatsiologii: Vses. Glyatsiol. Simpozium 3d, Frunze 1965, Materialy, p. 21-35, illus., 1968 (Izdatel'stvo "Ilim," Frunze).

Shuplyakova, V. P. See *Pavlov, A. V. 272-377*

Shur, A. S. See *Ovchinnikov, L. N. 265-049*

272-255 **Shurbet, D. H.** A low-velocity layer in the Earth's crust: Geol. Soc. Ameri Bull., v. 80, no. 5, p. 895-897, illus., 1969.

Shurkin, Yu. F. See *Shaub, Yu. B. 265-255*

269-647 **Shushakov, S. D.** Vertikal'naya reyka vremeni v seysmicheskoy razvedke [Ver cal time ruler in seismic surveying]: Razved. Geofizika, no. 27, p. 39-43, illus., 196

Shuster, G. I. See *Lebedinskiy, A. I. 268-098*

266-247 **Shutov, Yu. I.** Znacheniye kompleksnykh karstologo-geofizicheskikh metod razvedki dlya prognozirovaniya vodopritokov v gornyye vyrabotki pri rabotakh karstovykh rayonakh [Significance of combined karstological-geophysical metho of surveying for predicting water inflow into excavations in operations in karst gions (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geo Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 101-105, 1967.

Shvarev, V. V. See *Cherkasov, I. I. 265-099*

Shvarev, V. V. See *Cherkasov, I. I. 268-100*

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275-230 **Sidney Schafer and Associates.** Index map showing offshore gravity survey, Louisiana-Texas-Mississippi-Alabama and west Florida: Houston, Tex., Sidney Schafer and Associates, Inc., scale 1 in. to 12 mi., 1968.

269-218 **Sidorenkov, N. S.** Vliyaniye atmosfernoy tsirkulyatsii na skorost' vrashcheniya Zemli na primere 1956.8-1964.8 gg. [Effect of atmospheric circulation on the speed of rotation of the Earth illustrated by 1956.8-1964.8 (with English summ.)]: Astron. Zhur., v. 45, no. 4, p. 892-903, illus., tables, 1968.

274-136 **Sidorenkov, N. S.** Neravnomernost' vrashcheniya Zemli po dannym astronomicheskikh nablyudeniy za 1965.0-1968.0 gg. [Irregularity in the rotation of the Earth according to data of astronomical observations during 1965.0-1968.0 (with English summ.)]: Astron. Zhur., v. 46, no. 1, p. 215-218, illus., tables, 1969.

Sidorov, D. P. See *Makarov, K. K. 275-172*

264-059 **Sidran, Miriam.** Thermoluminescence of the Moon: Jour. Geophys. Research, v. 73, no. 16, p. 5195-5206, illus., tables, 1968.

265-008 **Siedner, G.; Miller, J. A.** K-Ar age determinations on basaltic rocks from South-West Africa and their bearing on continental drift: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 451-458, illus., table, 1968.

266-083 **Siegel, Frederic R.** Chemical composition of the surface of the Moon at the places where Surveyor V, Surveyor VI, and Surveyor VII landed: Asoc. Geol. Argentina Rev., v. 23, no. 2, p. 104-106, 1968.

Siemens, Gunter. See *Hahn, Albrecht. 273-382*

267-008 **Siems, Peter L.** Volcanic geology of the Rosita Hills and Silver Cliff district, Custer County, Colorado, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 89-124, illus., table, 1968.

271-194 **Sigl, Rudolf.** Special Study Group No. 22—Report on the meeting held at Leningrad, 22d of May, 1968: Bull. Geod., no. 90, p. 393-399, 1968.

Signorini, C. See *Egidi, A. 273-331*

Sigurdsson, H. See *Moorbath, S. 264-007*

Sigurdsson, H. See *Welke, H. 264-307*

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264-555 **Sigvaldason, Gudmundur E.** Structure and products of subaquatic volcanoes in Iceland: Contr. Mineralogy and Petrology, v. 18, no. 1, p. 1-16, illus., 1968.

264-556 **Sigvaldason, Gudmundur E.; Elisson, Gunnlaugur.** Collection and analysis of volcanic gases at Surtsey, Iceland: Geochim. et Cosmochim. Acta, v. 32, no. 8, p. 797-805, illus., tables, 1968.

68-194 **Siikarla, Toivo.** On the geophysical investigation in the Virtasalmi area: Finlande Comm. Geol. Bull., no. 233, 87 p., illus., tables, 1967.

66-161 **Sikharulidze, D. I.; Tutberidze, N. P.** O gruppakh poverkhnostnykh seysmicheskikh voln, formiruyushchikhsya v razlichnykh sloyakh zemnoy kory [On groups of seismic surface waves forming in different crustal layers]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 5-16, illus., tables, 1966.

Sikharulidze, D. I. See *Tvaltvadze, G. K. 266-164*

275-115 **Sikharulidze, D. I.** Eksperimental'noye izucheniye otrazhennykh poverkhnostnykh voln pri zemletryaseniyakh [Experimental study of reflected surface waves in earthquakes]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 8-16, illus., table, 1969.

268-187 **Sikorskiy, V. A.** Vozmozhnosti metoda radiokip v Aldanskom rayone [Possibilities of the "radiokip" method in the Aldan region]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 10, p. 120-125, illus., 1968.

Silayeva, O. I. See *Afanas'yev, G. D. 268-156*

268-165 **Silayeva, O. I.** Ul'trazvukovyye issledovaniya zavisimiosti uprugikh svoystv gornykh porod ot davleniya [Ultrasonic investigations of the dependence of elastic properties of rocks on pressure], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 152-156, illus., 1968.

Silayeva, O. I. See *Delitsyn, I. S. 268-166*

Silin, Yu. I. See *Krylov, A. Ya. 272-033*

Silin, Yu. I. See *Krylov, A. Ya. 275-027*

264-303 **Silker, W. B.; Robertson, D. E.; Rieck, H. G., Jr.; Perkins, R. W.; Prospero, J. M** Beryllium-7 in ocean water: Science, v. 161, no. 3844, p. 879-880, table, 1968.

Sill, W. R. See *Blank, J. L. 269-386*

273-255 **Sillitoe, R. H.; Mortimer, C.; Clark, A. H.** A chronology of landform evolutio and supergene mineral alteration, southern Atacama Desert, Chile: Inst. Mining an Metallurgy Trans., v. 77, Sec. B, Bull., no. 744, p. B166-B169, 1968.

Silverio, A. See *Rocha, M. 272-512*

Silverman, H. M. See *Aarons, J. 267-417*

270-370 **Simane, J.** Untersuchung der seismoakustischen Aktivitat im Gebirgsmassiv be einer kritischen Belastung [Investigation of the seismoacoustic activity in the roc massif under a critical load]: Freiberger Forschungshefte, C 225, p. 87-98, illus 1967.

Simane, Jindrich. See *Vinogradov, S. D. 272-155*

Simha, K. R. Madhwa. See *Datta, Satyabrata. 266-183*

270-501 **Simic, Nevenka.** Matematicka obrada podataka radiometrijskog gam oprobovanya, uzroci sistematskih gresaka i nacini njihovog otklanjanja [Mathemat cal treatment of the data of radiometric scanning, sources of systematic error, an methods of eliminating them (with English summ.)]: Inst. Geol.-Rud. Istrazivanja Istpitivanja Nuklearnih i Drugih Mineral. Sirovina Radovi, v. 3, p. 167-190, illus., t bles, 1967.

273-510 **Simkhayev, V. Z.; Sutuyev, A. B.; Samedov, S. S.** Metody interpretatsii mater alov geofizicheskikh issledovaniy s usloviyami zaleganiya nefti, gaza i vody n mestorozhdeniyakh Severnogo Dagestana [Methods of interpreting data of geophys cal investigations under the conditions of occurrence of oil, gas, and water in th North Dagestan fields]: Akad. Nauk Azerbaydzhan. SSR Doklady, v. 24, no. 11, 47-49, 1968.

Simmonds, P. G. See *Horowitz, N. H. 274-049*

266-360 **Simmons, Gene; Horai, Ki-iti.** Heat flow data 2: Jour. Geophys. Research, v. 7 no. 20, p. 6608-6629, table, 1968.

267-143 **Simmons, Gene; Nur, Amos.** Granites—Relation of properties in situ to laboratory measurements: Science, v. 162, no. 3855, p. 789-791, illus., table, 1968.

Simmons, Gene. See *Horai, Ki-iti. 268-149*

Simmons, Gene. See *Chung, D. H. 273-141*

274-167 **Simmons, Gene; Nur, Amos.** Granitic rocks—Properties in situ: Science, v. 165, no. 3889, p. 203, 1969.

267-138 **Simon, I.; Strong, P. F.** Measurement of static and dynamic response of the Green Building at the MIT campus to insolation and wind: Seismol. Soc. America Bull., v. 58, no. 5, p. 1631-1638, illus., 1968.

Simon, Ivan. See *McConnell, R. K., Jr. 268-577*

Simon, M. See *Gold, T. 264-075*

264-094 **Simon, Ruth B.** The Denver earthquakes, 1962-1967: Earthquake Notes, v. 39, nos. 1-2, p. 37-40, illus., 1968.

Simon, Ruth B. See *Major, Maurice W. 266-094*

272-108 **Simon, Ruth B.** Earthquake interpretations: Golden, Colo., Colorado School of Mines, unpaged, illus., tables, 1968.

Simon, Ruth B. See *Major, Maurice W. 274-115*

271-290 **Simon, Zdenek.** Die Thermohysterese und der Einfluss der Aussentemperatur bei dem Gravimeter Gs 12 Nr. 129 [Thermohysteresis and the effect of the external temperature in Gs 12 gravimeter no. 129 (with Russian summ.)]: Ceskoslovenska Akad. Ved Studia Geophys. et Geod., v. 13, no. 1, p. 25-34, illus., table, 1969.

272-344 **Simon, Zdenek.** Opredeleniye magnitnykh koeffitsiyentov fekhnerovskogo mayatnikovogo pribora [Determination of the magnetic coefficient of the Fechner pendulum apparatus (with German and Czech abs.)]: Ceskoslovenska Akad. Ved Geofys. Sbornik 1967, v. 15, p. 67-76, illus., tables, 1968.

Simoneit, Bernd R. See *Han, Jerry. 272-056*

265-326 **Simonenko, T. N.; Tolstikhina, M. M.** Blokovoye stroyeniye skladchatogo fundamenta Evropeyskoy chasti SSSR [Block structure of the folded basement of the European part of the U.S.S.R. (with English summ.)]: Geotektonika, no. 4, p. 37-53, illus., tables, 1968.

Simonenko, T. N. See *Tolstikhin, M. M. 268-438*

270-294 **Simonenko, T. N.** Proyavleniye zon razlomov zemnoy kory v magnitnom pole [Manifestation of abyssal fracture zones of the Earth's crust in the magnetic field (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 26, p. 5-12, illus., 1968.

Simonov, I. M. See *Kruchinin, Yu. A. 274-253*

Simons, D. B. See *Schumm, S. A. 274-053*

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268-575 **Simpson, Dale R.; Fergus, John H., Jr.** The effect of water on the compressive strength of diabase: Jour. Geophys. Research, v. 73, no. 20, p. 6591-6594, illus., table, 1968.

265-358 **Simpson, E. S. W.; duPlessis, A.** Bathymetric, magnetic, and gravity data from the continental margin of southwestern Africa, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1119-1123, illus., 1968.

Simpson, J. A. See *Retzler, J. 272-297*

Sinamati, M. E. See *Stepanov, A. I. 271-569*

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275-010 **Sinclair, A. J.; White, W. H.** Age of mineralization and post-ore hydrothermal alteration at Copper Mountain, B. C.: Canadian Mining and Metall. Bull., v. 61, no. 673, p. 633-636, illus., table, 1968.

Singer, S. See *Hones, E. W., Jr. 268-369*

Singer, S. See *Montgomery, Michael D. 273-335*

264-087 **Singer, S. F.** The origin of the Moon and geophysical consequences: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 205-226, illus., tables, 1968.

Singer, S. F. See *Nakada, M. P. 265-396*

Singh, B. See *Dutta, S. K. 266-543*

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Singh, R. D. See *Chouhan, Ramkishore S. 266-113*

267-387 **Singh, R. N.; Singh, R. P.** Synchrotron radiation from energetic electrons in the magnetosphere: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 459-463, illus., 1968.

268-341 **Singh, Randhir; Hayakawa, Masami; Iizuka, Susumu.** Some geophysical investigations for the crustal structure near Oshima, Japan: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 73-94, illus., tables, 1967.

Singh, Rishi Narain. See *Negi, Janardan G. 265-336, 265-337, 266-362*

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Singh, Sarva Jit. See *Ben-Menahem, Ari. 269-230*

273-143 **Singh, Sarva Jit; Ben-Menahem, Ari.** Eigenvibrations of the Earth excited by finite dislocations—[Pt.] 2, Spheroidal oscillations: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 333-350, illus., 1969.

274-147 **Singh, Sarva Jit; Ben-Menahem, Ari.** Eigenvibrations of the Earth excited by finite dislocations—[Pt.] 1, Toroidal oscillations: Royal Astron. Soc. Geophys Jour., v. 17, no. 2, p. 151-177, illus., table, 1969.

Singh, Sarva Jit. See *Ben-Menahem, Ari. 274-143*

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269-240 **Sinha, A. K.; Bhattacharya, P. K.** Vertical magnetic dipole buried inside a homogeneous earth: Radio Science, new ser., v. 1, no. 3, p. 379-395, illus., 1966.

273-171 **Sinha, Ajit K.** The magnetotelluric effect in an inhomogeneous and anisotropic earth: Geoexploration, v. 7, no. 1, p. 9-28, illus., 1969.

274-160 **Sinha, Hasi Rashi.** On disturbances in a visco-elastic solid of Maxwell type deformed by a magnetic field: Gerlands Beitr. Geophysik, v. 77, no. 6, p. 462-468, 1968.

266-544 **Sinha, J. K.** Methods for tensile strength determination of brittle materials: Metals and Minerals Rev., v. 7, no. 8, p. 5-12, illus., tables, 1968.

265-197 **Sinha, Nirmal Kumar.** Propagation of Love waves in a heterogeneous layer standing on a rigid base with a homogeneous layer: Acta Geophys. Polonica, v. 15, no. 4, p. 285-291, illus., tables, 1967.

274-150 **Sinha, Nirmal Kumar.** Propagation of Love-type waves in a non-homogeneous layer lying over a vertically semi-infinite homogeneous isotropic medium: Pure and Appl. Geophysics, v. 73, p. 47-59, illus., tables, 1969.

266-151 **Sinitsyn, A. P.** Raschet deformatsiy profilya plotiny ot seysmicheskikh nagruzok [Calculations of the deformations of the profile of a dam from seismic loadings], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 85-95, illus., 1967.

Sinitsyn, A. Ya. See *Popov, E. P. 267-641*

Sinitsyn, A. Ya. See *Novikov, G. F. 270-523*

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271-336 **Siráň, Gustáv.** Ponderomotoric forces and sudden irregularities in the Earth's rotation. [Pt.] 1: Československá Akad. Věd Studía Geophys. et Geod., v. 13, no. 1, p. 35-41, 1969.

Sirik, I. M. See *Sergeyev, K. F. 271-217*

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264-321 **Siscoe, G. L.; Formisano, V.; Lazarus, A. J.** Relation between geomagnetic sudden impulses and solar wind pressure changes—An experimental investigation: Jour. Geophys. Research, v. 73, no. 15, p. 4869-4874, illus., tables, 1968.

268-374 **Siscoe, G. L.; Lyon, E. F.; Binsack, J. H.; Bridge, H. S.** Experimental evidence for a detached lunar compression wave: Jour. Geophys. Research, v. 74, no. 1, p. 59-69, illus., 1969.

271-330 **Siscoe, G. L.; Goldstein, B.; Lazarus, A. J.** An east-west asymmetry in the solar wind velocity: Jour. Geophys. Research, v. 74, no. 7, p. 1759-1762, illus., 1969.

Sissons, J. B. See *Smith, D. E. 273-257*

Sitapathi Rao, P. See *Bhaskara Rao, V. 264-422*

Sizonenko, V. S. See *Sergatyuk, A. F. 266-230*

271-239 **Sizykh, V. I.** Unasledovannoye razvitiye neotektoniki ot drevnykh struktur v Zapadnom Zabaykal'ye [Inherited development of neotectonics from old structure in Western Transbaikalia], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 124-127, 1968.

Sjogren, W. L. See *Muller, P. M. 264-067*

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270-371 **Sklenář, J.** Über die Untersuchung der Geschwindigkeit von elastischen Wellen im Gebirge [On the investigation of elastic wave velocity in the massif]: Freiberger Forschungshefte, C 225, p. 99-112, illus., table, 1967.

Sklyarov, E. D. See *Artsimovich, G. V. 264-534*

271-075 **Skoko, Dragutin; Kotake, Yoshiko; Sato, Yasuo.** Optimum distribution of seismic observation point—[Pt.] 5, Desirable location of new stations in Yugoslavia [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 821-840, illus., tables, 1968.

273-462 **Skopec, Jiří.** Podschet effektivnoy skorosti rasprostraneniya seysmicheskikh voln pri pomoshchi metoda sredinnoy tochki [Determination of the effective velocity of propagation of seismic waves by the method of central point (with Czech abs.)]: Carolina Univ. Acta—Geologica 1968, no. 3, p. 269-276, illus., 1968.

275-156 **Skopichenko, M. F.; Groza, A. A.** Geoelektricheskaya struktura Podol'skoy tektonicheskoy zony i razreshayushchaya sposobnost' elektricheskikh zondirovaniy dlya yeye issledovaniya [Geoelectrical structure of the Podolian tectonic zone and the resolving power of electrical soundings for its investigation (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 62-70, illus., 1969.

275-114 **Skorik, L. A.** Spektry privedennykh seysmicheskikh uskoreniy pri oshchutimykh zemletryaseniyakh [Spectrums of reduced seismic accelerations in felt earthquakes]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 78-85, illus., tables, 1969.

275-419 **Skornyakov, N. S.** Sediments in the northeastern Pacific, *in* Oceanographic research by the "Vityaz" in the North Pacific under the I.G.Y. program (translated from Russian, Akad. Nauk SSSR Inst. Okeanologii Trudy, v. 45, 1961): Springfield, Va., U.S. Clearinghouse Federal Sci. and Tech. Inf., p. 18-62, illus., tables, 1969.

273-195 **Skornyakov, S. M.** O metodike provedeniya radioprofilirovaniya v skvazhinakh [On the procedure of conducting radio profiling in boreholes]: Razved. i Okhrana Nedr, no. 12, p. 34-40, illus., tables, 1968.

Skorobogatova, N. V. See *Apel'tsin, F. R. 267-038*

267-118 **Skorsky, A. A.** Geological and tectonic factors in the Skopje earthquake of 26 July 1963, *in* The Skopje earthquake 1963: Amsterdam, Netherlands, UNESCO, p. 131-152, illus., 1968.

Skovorodkin, Yu. P. See *Barsukov, O. M. 267-432*

273-389 **Skovorodkin, Yu. P.** O prigodnosti lav dlya opredeleniye paleomagnitnogo polya [On the suitability of lavas for determination of a paleomagnetic field]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 106-110, illus., tables, 1969.

Skovorodkin, Yu. P. See *Barsukov, O. M. 275-347*

Skrotskiy, G. V. See *Pomerantsev, N. M. 264-437*

268-204 **Skuba, P. I.** Vydeleniye anomaliy na fone intensivnykh pomekh [Bringing out anomalies on a background of intensive noise]: Akad. Nauk SSSR Sibirskoye Otdeleniye, no. 7, p. 104-108, illus., 1968.

273-236 **Škvor, Vladimír.** The Caribbean area—A case of destruction and regeneration of continent: Geol. Soc. America Bull., v. 80, no. 6, p. 961-968, illus., 1969.

Skwarko, S. K. See *Wells, A. T., Stewart, A. J. 274-213*

265-454 **Slack, Howard A.; Lynch, Vance M.; Langan, Lee V.** Reply by authors to discussion by Dr. Nelson C. Steenland [of "The geomagnetic gradiometer' (Geophysics, October 1967, p. 877-892): Geophysics, v. 33, no. 4, p. 683-686, illus., 1968.

Sladkov, Yu. V. See *Kolesnikov, Yu. A. 266-158*

275-142 **Slankis, J. A.; Becker, A.** Telluric and magneto-telluric measurement at 8 Hz: Soc. Mining Engineers Trans., v. 244, no. 2, p. 237-244, illus., 1969.

Slavin, V. I. See *Chekunov. A. V. 269-369*

Slavina, L. B. See *Kondorskaya, N. V. 273-138*

266-168 **Slavinskaya, A. A.** Izmeneniye shiroty Poltavy po nablyudeniyam na astrolyabii Danzhona v 1961.0-1964.4 gg. [Latitude variations at Poltava according to observations with the Danjon astrolabe in 1961.0-1964.4 (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 180-184, illus., table, 1967.

269-288 **Sleep, Norman H.** Sensitivity of heat flow and gravity to the mechanism of seafloor spreading: Jour. Geophys. Research, v. 74, no. 2, p. 542-549, illus., 1969.

Sleight, A. W. See *Prewitt, C. T. 269-360*

273-267 **Slemmons, David B.** Pliocene and Quaternary crustal movements of the Basin-and-Range province, USA, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 91-103, illus., table, 1967.

269-654 **Slepakova, G. I.** Stroyeniye nadsolevykh otlozheniy Prikaspiyskoy vpadiny po geofizicheskim dannym v svyazi s ikh neftegazonosnost'yu [Structure of the suprasalt formations of the Caspian basin according to geophysical data in connection with their oil and gas possibilities]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 34-38, illus., 1968.

264-491 **Slutovskiy, A. I.** Eksperimental'nyye issledovaniya dinamiki raboty sistemy ARU v usilitelyakh seysmostantsiy [Experimental investigations of the dynamics of operation of an AGC system in the amplifiers of a seismic station]: Pridladnaya Geofizika, no. 50, p. 96-113, illus., 1967.

268-551 **Slutskovskiy, A. I.; Meshbey, V. I.** Ob effektivnosti gruppirovaniya s neravnomernymi vremennymi integralami [On the efficiency of grouping with unequal time integrals]: Prikladnaya Geofizika, no. 52, p. 18-25, illus., 1968.

Slutsky, Mary. See *Fischer, Irene. 271-168*

Smakhtina, A. M. See *Gavrilov, Ye. Ya. 272-291*

274-105 **Small, James B.; Wharton, Lawrence C.** Vertical displacements determined by surveys after the Alaskan earthquake of March 1964, *in* The Prince William Sound, Alaska, earthquake of 1964 and aftershocks, V. 3: U.S. Coast and Geod. Survey Pub. 10-3, p. 21-33, illus., tables, 1969.

Smalley, Vern G. See *Salisbury, John W. 270-052*

Smart, J. G. O. See *Francis, E. H. 266-029*

Šmejkal, Václav. See *Dudek, Arnost. 267-025*

270-402 **Smelyanskaya, T. V.** Rezul'taty rabot KMPV po izucheniyu stroyeniya Dneprovsko-Donetskoy vpadiny vdol' profilya Bliznetsy-Shevchenkovo [Results of refraction correlation work to study the structure of the Dnieper-Donets basin along the Bliznetsy-Shevchenkovo profile (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 47-55, illus., 1968.

271-535 **Smelyanskaya, T. V.** Vyznachennya shvydkīsnykh parametrīv seredovyshch za hodohrafamy zalomlenykh khvyl' [Determination of the velocity parameters of a medium from refracted wave traveltime curves (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 11, p. 1002-1005, illus., 1968.

Smilga, V. P. See *Belousov, I. M. 268-607*

Smirkovská, Vera. See *Homola, Vladimir. 270-280*

269-592 **Smirnov, G. S.; Kornilov, F. M.; Tikhomirov, N. D.; Vetrov, A. G.** Gamma-spektrometricheskiy metod pri geologicheskom kartirovanii i poiskakh poleznykh iskopayemykh [Gamma spectrometric method in geologic mapping and prospecting for useful minerals], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 235-242, illus., tables, 1968.

Smirnov, J. B. See *Makarenko, F. A. 268-300*

Smirnov, L. P. See *Bobrov, Yu. V. 264-267*

Smirnov, L. P. See *Stroyev, P. A. 264-268*

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Smirnov, L. P. See *Bobrov, Yu. V. 268-278*

Smirnov, L. P. See *Veselov, K. Ye. 271-272*

Smirnov, R. V. See *Podshibyakin, A. K. 266-440*

265-658 **Smirnov, V. A.; Preobrazhenskiy, V. B.; Aksenov, V. K.** Primeneniye apparatury s promezhutochnoy magnitnoy zapis'yu dlya registratsii gornykh udarov [Application of apparatus with intermediate magnetic recording to the registration of rock bursts]: Geofiz. Apparatura, no. 32, p. 116-121, illus., 1967.

Smirnov, V. F. See *Shterengarts, Ye. M. 270-397*

274-410 **Smirnov, V. N.; Lin'kov, Ye. M.** Sravitel'nyye issledovaniya mikroseysm i izgibno-gravitatsionnykh voln v Antarktike [Comparative investigations of microseisms and bending-gravity waves in the Antarctic]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 89-93, illus., 1969.

Smirnov, V. N. See *Tauson, L. V. 275-024*

265-340 **Smirnov, Ya. B.** Issledovaniya geneticheskikh svyazi teplovogo polya so stroyeniyem i razvitiyem zemnoy kory [Investigations of the genetic relationships of the thermal field to the structure and evolution of the Earth's crust]: Akad. Nauk SSSR Doklady, v. 177, no. 1, p. 182-184, illus., table, 1967.

265-341 **Smirnov, Ya. B.** Teplovaya energiya Zemli i yeye geologicheskiye proyavleniya [Thermal energy of the Earth and its geologic manifestations]: Akad. Nauk SSSR Doklady, v. 177, no. 2, p. 325-328, illus., 1967.

Smirnov, Ya. B. See *Polyak, B. G. 265-345*

269-321 **Smirnov, Ya. B.** Svyaz' teplovogo polya so stroyeniyem i razvitiyem zemnoy kory i verkhney mantii [Relationship of the thermal field to the structure and evolution of the Earth's crust and upper mantle (with English summ.)]: Geotektonika, no. 6, p. 3-25, illus., tables, 1968.

Smirnov, Ya. B. See *Makarenko, F. A. 270-233*

Smirnov, Ya. B. See *Makarenko, F. A. 270-234*

267-337 **Smirnov, Yu. D.; Kukushkin, A. I.** O stroyenii i sostave naiboleye glubokikh gorizontov zemnoy kory v predelakh Ural'skoy skladchatoy oblasti [On the structure and composition of the deepest horizons of the Earth's crust within the Ural folded region], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 306-310, illus., 1968.

Smirnov, Yu. I. See *Alekseyev, A. M. 270-143*

Smirnova, A. V. See *Alekseyeva, K. N. 268-039*

Smirnova, M. N. See *Rustanovich, D. H. 271-089*

271-090 **Smirnova, M. N.** O vliyanii zemletryaseniy na dobychu nefti mestorozhdeniya Gudermes (Severo-Vostochnyy Kavkaz) [On the effect of earthquakes on the output of petroleum in the Gudermes field (Northeastern Caucasus)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 71-80, illus., table, 1968.

Smirnova, N. A. See *Nersesov, I. L. 271-095*

264-324 **Smit, Gjalt R.** Oscillatory motion of the nose region of the magnetosphere: Jour. Geophys. Research, v. 73, no. 15, p. 4990-4993, 1968.

Smith, A. Gilbert. See *Funnell, B. M. 266-291*

268-046 **Smith, B. A.; Reese, E. J.** Mercury's rotation period—Photographic confirmation: Science, v. 162, no. 3859, p. 1275-1277, illus., table, 1968.

Smith, B. A. See *Reese, E. J. 269-126*

269-125 **Smith, Bradford A.; Robinson, J. C.** Mars Mariner IV—Identification of some Martian surface features: Icarus, v. 9, no. 3, p. 466-473, illus., 1968.

Smith, D. See *McConnell, R. B. 275-232*

273-257 **Smith, D. E.; Sissons, J. B.; Cullingford, R. A.** Isobases for the Main Perth Shoreline in south-east Scotland as determined by trend-surface analysis: Inst. British Geographers Trans., no. 46, p. 45-52, illus., tables, 1969.

Smith, D. G. W. See *O'Nions, R. K. 272-016*

Smith, D. G. W. See *Folinsbee, R. E. 274-037*

Smith, D. Taylor. See *Buchan, S. 264-535*

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Smith, Edward J. See *Russell, Christopher T. 265-387*

Smith, Edward J. See *Coleman, Paul J., Jr. 273-333*

273-344 **Smith, Edward J.; Holzer, Robert E.; Russell, Christopher T.** Magnetic emissions in the magnetosheath at frequencies near 100 Hz: Jour. Geophys. Research, v. 74, no. 11, p. 3027-3036, illus., 1969.

Smith, Edward J. See *Frandsen, Allan M. A. 275-309*

Smith, Eugene I. See *Elston, Wolfgang E. 273-072*

266-010 **Smith, G. I.** Late-Quaternary geologic and climatic history of Searles Lake, southeastern California, *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 293-310, illus., 1968.

272-261 **Smith, J. V.** Magnesium pyroxene at high temperature—Inversion in clinoenstatite: Nature, v. 222, no. 5190, p. 256-257, tables, 1969.

Smith, J. W. See *Lucas, J. W. 267-079*

Smith, James H. See *Mellor, Malcolm. 272-199*

272-540 **Smith, James Ward; Thomas, Harold E.; Trudell, Laurence G.** Geologic factors affecting density logs in oil shale, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. P1-P17, illus., tables, 1968.

269-422 **Smith, John D.; Foster, John H.** Geomagnetic reversal in Brunhes normal polarity epoch: Science, v. 163, no. 3867, p. 365-367, illus., table, 1969.

Smith, Joseph V. See *Moore, Paul B. 269-367*

264-322 **Smith, Lawrence B.** An observation of strong thermospheric winds during a geomagnetic storm: Jour. Geophys. Research, v. 73, no. 15, p. 4959-4963, illus., 1968.

274-216 **Smith, Martin L.; Franklin, Joel N.** Geophysical application of generalized inverse theory: Jour. Geophys. Research, v. 74, no. 10, p. 2783-2785, 1969.

270-165 **Smith, P. J.** Geophysics policy—A select, annotated bibliography: Earth-Sci. Rev., v. 4, no. 3, p. A173-A186, 1968.

Smith, P. L. See *Axon, H. J. 270-037*

269-440 **Smith, Peter J.** Ancient geomagnetic field intensities—[Pt.] 3, Historic and archeological data H13X and H14-15; Geological data, G22-29: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 457-460, tables, 1968.

271-334 **Smith, Peter J.** Pre-Gilbertian conceptions of terrestrial magnetism: Tectonophysics, v. 6, no. 6, p. 499-510, 1968.

270-442 **Smith, Robert L.; Bailey, Roy A.** Resurgent cauldrons, *in* Studies in volcanology—A memoir in honor of Howel Williams: Geol. Soc. America Mem. 116, p. 613-662, illus., tables, 1968.

Smith, Robert L. See *Doell, Richard R. 271-364*

Smith, S. M. See *Larson, Roger L. 264-210*

Smith, S. W. See *Scholz, C. H. 273-113*

Smith, Stewart W. See *Davies, John B. 267-100*

269-188 **Smith, Stewart W.; Wyss, Max.** Displacement on the San Andreas fault subsequent to the 1966 Parkfield earthquake: Seismol. Soc. America Bull., v. 58, no. 6, p. 1955-1973, illus., tables, 1968.

Smith, T. J. See *Steinhart, J. S. 273-306*

264-085 **Smith, T. Scott.** Correlation between solar activity and the brightness of Jupiter's great red spot: Nature, v. 219, no. 5152, p. 357, 1968.

270-490 **Smith, W. D. M.** Formation factor values in Western Canada reservoirs, *in* Formation evaluation symposium, 2d, Calgary, Alberta, 1968: [Calgary, Alberta] Canadian Well Logging Soc., p. B1-B10, illus., 1968.

274-470 **Smith, W. D. M.** Petrophysical relationships from Western Canada area, *in* SPWLA Logging Symposium, 10th Ann., Houston, Tex., 1969, Trans.: Houston, Tex., Soc. Prof. Well Log Analysts, p. A1-A25, illus., 1969.

269-190 **Smith, W. E. T.; Whitham, Kenneth; Piche, W. T.** A microearthquake swarm in 1965 near Mould Bay, N. W. T., Canada: Seismol. Soc. America Bull., v. 58, no. 6, p. 1991-2011, illus., tables, 1968.

Smith, W. E. T. See *Milne, W. G. 275-104*

268-095 **Smith, William B.; Bowles, Kenneth L.; Shapiro, Irwin I.** Interplanetary plasma densities deduced from radar observations of Venus, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 26-33, illus., 1968.

272-208 **Smithson, Scott B.** Granite studies—[Pt.] 1, A gravity investigation of two Precambrian granites in South Norway: Norges Geol. Undersökelse Skr., no. 214B, p. 53-140, illus., tables, 1963.

272-209 **Smithson, Scott, B.** Granite studies—[Pt.] 2, The Precambrian Fla granite, a geological and geophysical investigation—Gravimetry: Norges Geol. Undersökelse Skr., no. 219, p. 112-122, illus., table, 1963.

Smits, L. J. M. See *Waxman, M. H. 274-468*

274-469 **Smits, L. J. M.** SP log interpretation in shaly sands: Soc. Petroleum Engineers A.I.M.E. Trans., v. 243 (pt. 2), p. 123-136, illus., tables, reprinted 1969; originally published 1968.

Smokler, M. I. See *Bird, T. H. 269-136*

Smol'nikov, B. M. See *Dublyanskiy, V. M. 266-226*

Smol'nikov, B. M. See *Dubinskiy, V. N. 268-191*

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Smorodinov, M. I. See *Cherkasov, I. I. 268-100*

268-337 **Smulikowski, Kazimierz.** Theoretical and geological arguments for eclogite occurrence in the upper mantle, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 165-174, illus., 1968.

Smylie, D. E. See *Mansinha, L. 265-100*

Smylie, D. E. See *Lilley, F. E. M. 266-176*

Smylie, D. E. See *McFadden, C. P. 267-221*

268-108 **Smylie, D. E.; Mansinha, L.** Earthquakes and the observed motion of the rotation pole: Jour. Geophys. Research, v. 73, no. 24, p. 7661-7673, illus., table, 1968.

Smyslov, A. A. See *Baranov, G. M. 275-353*

Smyth, D. L. See *Bird, T. H. 269-136*

Snavely, P. D., Jr. See *Tatsumoto, M. 270-246*

Snegorovskoy, S. S. See *Milashin, A. P. 275-371*

269-598 **Snell, Francis A.** Note on a useful approximation for refraction shooting: Geophysics, v. 33, no. 6, p. 1013-1014, illus., 1968.

Snelling, N. J. See *Francis, E. H. 266-029*

Snelling, N. J. See *Vail, J. R. 273-013*

275-013 **Snelling, N. J.; McConnell, R. B.** The geochronology of Guyana: Geologie en Mijnbouw, v. 48, no. 2, p. 201-213, illus., tables, 1969.

266-097 **Snow, David T.** Fracture deformation and changes of permeability and storage upon changes of fluid pressure, *in* Geophysical and geological studies of the relationships between the Denver earthquake and the Rocky Mountain Arsenal well, Pt. A: Colorado School Mines Quart., v. 63, no. 1, p. 201-244, illus., 1968.

272-527 **Snow, R. B.; Throop, W. H.; Williams, J. A.** Logging offshore wells in the United States, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. B1-B13, illus., 1968.

264-216 **Snyder, Frank G.** Tectonic history of midcontinental United States, *in* A coast to coast tectonic study of the United States: UMR Jour., no. 1 (V. H. McNutt-Geology Dept. Colloquium Ser. 1), p. 65-77, illus., tables, 1968.

271-564 **Snyder, R. P.** Electric and caliper logs as lithologic indicators in volcanic rocks, Nevada Test Site, *in* Nevada Test Site: Geol. Soc. America Mem. 110, p. 117-124, illus., 1968.

269-370 **Sobakar', G. T.** Neodnorodnosti verkhney mantii Ukrainy [Inhomogeneity of the upper mantle in the Ukraine]: Akad. Nauk SSSR Doklady, v. 179, no. 6, p. 1417-1420, illus., 1968.

271-299 **Sobakar, G. T.** Kvazīperiodychnī varīatsīyi syly tyazhīnnya Ukrayīny [Quasi-periodic variations of gravity in the Ukraine (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 9, p. 781-783, illus., 1968.

Sobczak, L. W. See *Berkhout, A. W. J. 275-231*

264-553 **Sobieralski, V. Ralph.** Volcanic activity, *in* Manual of color aerial photography: Falls Church, Va., Am. Soc. Photogrammetry, p. 416-417, illus., 1968.

Sobolev, A. V. See *Troitskaya, V. A. 271-349*

Sobolev, G. A. See *Volarovich, M. P. 268-183*

Sobolev, G. A. See *Uspenskaya, A. B. 275-148*

267-331 **Sobolev, I. D.** Osnovnyye cherty glubinnogo stroyeniye Urala [Main features of the deep structure of the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 28-37, 1968.

268-336 **Sobolev, N. V.** The xenoliths of eclogites from the kimberlite pipes of Yakutia as fragments of the upper mantle substance, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 155-163, illus., 1968.

Soboleva, O. V. See *Leonov, N. N. 264-135*

Soboleva, O. V. See *Leonov, N. N. 265-171*

267-126 **Soboleva, O. V.** Vliyaniye asimmetrii izlucheniya iz ochaga na raspredeleniy smeshcheniy vokrug epitsentra glubokogo zemletryaseniya [Effect of asymmetry o

radiation from the focus on the distribution of displacements around the epicenter of a deep focus earthquake]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 45-56, illus., table, 1968.

265-268 **Sochel'nikov, V. V.** Ob opredelenii udel'noy provodimosti glubokikh sloyev Zemli [On determinations of the specific conductivity of deep layers of the Earth]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 65-70, illus., 1968.

266-577 **Sochel'nikov, V. V.** Vliyaniye tokov provodimosti v magnitnom karotazhe pri izmereniyakh s odnokatushechnym zondom [Effect of conductivity currents in magnetic logging in the case of measurements with a single-coil sonde]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 7, p. 110-117, illus., tables, 1968.

268-630 **Sochel'nikov, V. V.** Vliyaniye konechnykh razmerov katushek zonda na rezul'taty magnitnogo karotazha [Effect of the finite dimensions of the coil of the sonde on the results of magnetic logging]: Prikladnaya Geofizika, no. 52, p. 169-179, tables, 1968.

Sochel'nikov, V. V. See *Gol'mshtok, A. Ya. 273-192*

Socolescu, M. See *Ciocardel, R. 265-302*

272-165 **Soderberg, Emil F.** ELF noise in the sea at depths from 30 to 300 meters: Jour. Geophys. Research, v. 74, no. 9, p. 2376-2387, illus., 1969.

265-447 **Soffel, Heinrich; Supalak, Preecha.** Palaomagnetische Messungen am Basalt des Parkstein bei Weiden (Bayern) [Paleomagnetic measurements on the Parkstein basalt near Weiden (Bavaria)]: Zeitschr. Geophysik, v. 34, no. 3, p. 287-296, illus., table, 1968.

264-287 **Soga, Naohiro.** Elastic properties of CaO under pressure and temperature: Jour. Geophys. Research, v. 73, no. 16, p. 5385-5390, illus., tables, 1968.

Sogani, K. C. See *Paul, P. C. 264-172*

Sokhranov, N. N. See *Babak, A. P. 269-710*

275-446 **Sokhranov, N. N.** Sistema obrabotki promyslovo-geofizicheskikh dannykh na EVM [A system of processing geophysical logging data on a computer]: Neftegazovaya Geologiya i Geofizika, no. 1, p. 43-45, illus., 1969.

Sokolov, A. F. See *Lozinsky, Z. N. 266-517*

269-705 **Sokolov, A. F.** Paletka dlya privedeniya vremen k vertikali pri obrabotke dannykh seysmokarotazha odnorodnykh sred [Master curve for reducing time to the vertical in processing the data of seismic logging of homogeneous mediums]: Razved. Geofizika, no. 26, p. 39-40, illus., 1968.

269-341 **Sokolov, V. L.; Krichevskiy, G. N.; Polyakova, Ye. G.** O svyazi solyarnoy tektoniki s blokovoy strukturoy podsolevogo lozha [On the relationship of salt tectonics to the block structure of the subsalt floor (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 202-208, illus., 1968.

Sokolova, L. S. See *Moiseyenko, U. I. 272-239*

Sokolova, M. H. See *Shlyukova, Z. V. 275-286*

Sokolova, N. A. See *Zhuravlev, V. S. 265-644*

267-268 **Sokolovskiy, K. I.; Arshinova, N. Ya.; Zapol'skaya, G. V.** Metod analiticheskogo prodolzheniya gravitatsionnykh i magnitnykh anomaliy v bokovoye prostranstvo i rezul'taty yego primeneniya [The method of analytical continuation of gravitational and magnetic anomalies into lateral space and results of its application]: Razved. i Okhrana Nedr, no. 9, p. 33-37, illus., table, 1968.

273-223 **Sokolovskiy, K. I.** Pro zastosuvannya kvazīīntehral'noho operatora analītychnoho prodovzhdennya [On the application of a quasi-integral operator in analytical continuation (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 3, p. 240-243, illus., 1969.

274-273 **Sokolovskiy, K. I.** Pro kvazīīntehral'nyy operator analītychnoho prodovzhennya potentsīal'noho polya [On a quasi-integral operator of analytical continuation of a potential field (with English summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 2, p. 116-120, 1969.

275-241 **Sokolovskiy, K. I.** Metod analiticheskogo prodolzheniya dvykhmernykh potentsial'nykh poley pri polugranichennom raspredelenii vozmushchayushchikh mass [A method of analytical continuation of two-dimensional potential fields in the case of semi-infinite distribution of the disturbing masses (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 28, p. 11-28, illus., 1969.

264-083 **Solberg, H. Gordon, Jr.** Jupiter's Red Spot in 1966-1967: Icarus, v. 9, no. 1, p. 212-216, illus., 1968.

267-081 **Solberg, H. Gordon, Jr.** Jovian North Equatorial Belt spots in 1966-67: Planetary and Space Sci., v. 16, no. 8, p. 1061-1067, illus., tables, 1968.

266-112 **Soldati, Gian Carlo.** Notizie storiche su fenomeni sismici nelle Alpi Marittime [Historical report on the seismic phenomena of the Maritime Alps (with French abs.)]: Soc. Geol. Italiana Boll., v. 86, no. 4, p. 777-779, 1967.

Sollogub, V. See *Subbotin, S. 267-581*

Sollogub, V. B. See *Subbotin, S. I. 265-350*

Sollogub, V. B. See *Chekunov. A. V. 269-369*

Sollogub, V. B. See *Subbotin, S. I. 269-372*

270-244 **Sollogub, V. B.** O prirode seysmicheskikh granits zemnoy kory [On the nature of the seismic boundaries in the Earth's crust (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 5-17, illus., 1968.

270-401 **Sollogub, V. B.; Kalyuzhnaya, L. T.; Chekunov, A. V.** Glubinnoye stroyeniye zemnoy kory v rayone Korostenskogo plutona po dannym seysmicheskikh issledovaniy [Deep crustal structure in the region of the Korosten pluton according to data of seismic investigations (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 25, p. 31-46, illus., 1968.

Sollogub, V. G. See *Subbotin, S. I. 268-333*

Solodilova, V. V. See *Benevolenskiy, I. P. 272-386*

Solodovnikov, G. M. See *Bol'shakov, A. S. 267-447*

Solodovnikov, G. M. See *Bol'shakov, A. S. 275-342*

Solomatin, Yu. P. See *Manilov, F. I. 266-347*

Solomon, Faïza. See *Ben-Menahem, Ari. 274-143*

272-075 **Solomon, Sean C.; Toksoz, M. Nafi.** On the density distribution in the Moon: Physics Earth and Planetary Interiors, v. 1, no. 7, p. 475-484, illus., tables, 1968.

Solonenko, V. P. See *Florensov, N. A. 271-212*

Solov'yev, B. A. See *Budnikov, N. P. 275-193*

Solov'yev, G. A. See *Zubatareva, L. I. 267-475*

268-206 **Solov'yev, O. A.** O nekotorykh svoystvakh normirovannogo prostranstva potentsial'nykh funktsiy [On some properties of normalized space of potential functions], *in* Prilozheniye nekotorykh metodov matematiki k interpretatsii geofizicheskikh dannykh: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologiya i Geofiziki (Izdatel'stvo "Nauka" Sibirskoye Otdeleniye), p. 98-113, 1967.

268-290 **Solov'yev, O. A.** Prilozheniye algebry lineynykh operatorov k issledovaniyu lineynykh preobrazovaniy potentsial'nykh poley [Application of linear operator algebra to investigation of linear transformations of potential fields], *in* Prilozheniye nekotorykh metodov matematiki k interpretatsii geofizicheskikh dannykh: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye, Inst. Geologiya i Geofiziki (Izdatel'stvo "Nauka" Sibirskoye Otdeleniye), p. 92-97, 1967.

272-185 **Solov'yev, O. A.** K voprosu ob analiticheskom prodolzhenii potentsial'nykh funktsiy v nizhneye poluprostranstvo [On the problem of the analytical continuation of potential functions into the lower half space]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 118-124, 1968.

Solov'yev, O. N. See *Gaynanov, A. G. 268-315*

Solov'yev, S. I. See *Troitskaya, V. A. 271-349*

264-138 **Solov'yev, S. L.** (and others). Zemletryaseniya Dal'nego Vostoka [Earthquakes in the Far East], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 128-165, illus., tables, 1967.

Solov'yev, S. L. See *Vorob'yeva, Ye. A. 264-148*

265-174 **Solov'yev, S. L.; Poplavskaya, L. N.; Solov'yeva, O. N.; Oskorbin, L. S.; Volkova, L. F.; Glebova, A. N.; Gulevskiy, V. I.; Zel'manchuk, V. A.** Zemletryaseniya Dal'nego Vostoka [Earthquakes in the Far East], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 119-158, illus., tables, 1967.

266-147 **Solov'yev, S. L.** Razvitiye rabot po gidroakustike podvodnykh zemletryaseniy [Development of work on the hydroacoustics of submarine earthquakes]: Akad. Nauk SSSR Vestnik, no. 1, p. 77-80, illus., 1968.

271-093 **Solov'yev, S. L.** Problema tsunami i yeye znacheniye dlya Kamchatki i Kuril'skikh ostrovov [The tsunami problem and its significance for Kamchatka and the Kurile Islands], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 7-50, illus., tables, 1968.

Solov'yev, S. L. See *Solov'yeva, O. N. 271-096*

271-101 **Solov'yev, S. L.; Voronin, R. S.; Voronina, S. I.** Seysmicheskiye i gidroakusticheskiye dannyye o volne T (obzor literatury) [Seismic and hydroacoustic data on the T wave (review of the literature)], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 141-173, illus., tables, 1968.

271-106 **Solov'yev, S. L.; Militeyev, A. N.** Proyavleniye Niigatskogo tsunami 1964 g. na poberezh'ye SSSR i nekotoryye dannyye ob istochnike voln [Manifestation of the Niigata tsunami of 1964 on the coast of the U.S.S.R. and some data on the source of the waves], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 213-231, illus., tables, 1968.

271-107 **Solov'yev, S. L.** Sanakh-Kad'yakskoye tsunami 1788 g. [The Sanak-Kodiak tsunami of 1788], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 232-237, illus., 1968.

Solov'yev, S. L. See *Anakhin, V. D. 273-133*

273-137 **Solov'yev, S. L.** Soveshchaniye po probleme tsunami [Symposium on the tsunami problem]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 103-106, 1969.

Solov'yeva, O. N. See *Solov'yev, S. L. 265-174*

271-096 **Solov'yeva, O. N.; Solov'yev, S. L.** Novyye dannyye o dinamike seysmicheskikh voln neglubokofokusnykh Kurilo-Kamchatskikh zemletryaseniy [New data on the dynamics of seismic waves of shallow Kurile-Kamchatka earthquakes], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 75-96, illus., tables, 1968.

269-642 **Solukvadze, G. M.; Shneyerson, M. V.** Opredeleniye skorostey rasprostraneniya uprugikh voln po uproshchennomu i raznostnomu sposobam parametricheskikh diagramm [Determination of elastic wave velocities by the simplified and difference methods of parametric diagrams]: Razved. Geofizika, no. 27, p. 3-7, illus., 1968.

Somayajulu, B. L. K. See *Radhakrishnamurty, C. 265-434*

Somayajulu, B. L. K. See *Goldberg, Edward D. 270-249*

Somers, Lee H. See *Dietz, Robert S. 267-608*

Somlyay, Zoltán. See *Szabo, Janos. 270-508*

266-327 **Somov, V. I.** Variant karty sovremennykh vertikal'nykh dvizheniy zemnoy kory Sovetskikh Karpat [A variant of the map of recent vertical movements of the Earth's crust in the Soviet Carpathians (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 20-23, illus., 1967.

266-033 **Sonet, Jacques.** Essai d'interpretation d'un ensemble de mesures géochronologiques au Rb:Sr des massifs granitiques vendéens – Mise en évidence d'une dualite genetique [Interpretation of a group of geochronological Rb:Sr measurements from the Vendean granitic massifs—Evidence of a genetic duality]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 1, p. 15-17, illus., 1968.

Sonet, Jacques. See *Leutwein, Friedrich. 272-026*

Sonet, Jacques. See *Leutwein, Friedrich. 274-016*

265-082 **Sonett, C. P.; Colburn, D. S.; Schwartz, K.** Electrical heating of meteorite parent bodies and planets by dynamo induction from a pre-main sequence T Tauri "solar wind": Nature, v. 219, no. 5157, p. 924-926, illus., table, 1968.

266-067 **Sonett, C. P.; Colburn, D. S.; Schwartz, K.** The motional voltmeter—A method of distinction between hot and cold Moon based upon the solar wind-induced planetary dynamo current system: Jour. Geophys. Research, v. 73, no. 20, p. 6601-6603, illus., 1968.

266-424 **Sonett, C. P.; Colburn, D. S.** The principle of solar wind induced planetary dynamos: Physics Earth and Planetary Interiors, v. 1, no. 5, p. 326-346, illus., 1968.

Sonett, C. P. See *Mihalov, J. D. 267-384*

270-257 **Sonnerup, B. U. O.** Acceleration of particles reflected at a shock front: Jour. Geophys. Research, v. 74, no. 5, p. 1301-1304, illus., 1969.

272-301 **Sonnerup, B. U. O.; Cahill, L. J., Jr.; Davis, L. R.** Resonant vibration of the magnetosphere observed from Explorer 26: Jour. Geophys. Research, v. 74, no. 9, p. 2276-2288, illus., tables, 1969.

269-062 **Sonntag, C.** Extremely low-level scintillation spectrometer, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 675-686, illus., tables, 1967.

Sonntag, C. See *Spannagel, G. 269-101*

Sontag, Erika. See *Fischer, Wolfgang. 265-373*

Soprunyuk, P. M. See *Lutsyshin, A. S. 265-258*

Soprunyuk, P. M. See *Lutsishin, A. S. 270-169*

Soptrayanova, G. See *Hanson, G. N. 272-017*

269-614 **Sörnes, Anders; Sellevoll, Markvard A.** Site selection for a seismic array station and crustal studies in Norway 1965—1 April 1965—31 December 1966: Bergen, Norway, Bergen Univ. Seismol. Observatory (ARPA No. 612-1, Contract No. AF61(052)-859), 93 p., illus., tables, 1967.

Sorokhtin, O. G. See *Zdorovenin, V. V. 268-565*

Sorokhtin, O. G. See *Sagalevich, A. M. 274-439*

267-472 **Sorokin, A. V.; Buts'ko, Ye. A.** Kompensatsiya magnitnogo polya samoleta [Compensation of the magnetic field of an airplane]: Geofiz. Apparatura, no. 34, p. 101-105, illus., 1967.

Sorokov, D. S. See *Gramberg, I. S. 275-175*

Sotnikov, V. I. See *Vasilenko, V. B. 273-314*

269-329 **Soukoreff, W. W.** Gravity survey tested at Kisbey: Oilweek, v. 19, no. 33, p. 29-32, illus., 1968.

274-257 **Soukoreff, W. W.** Using the gravimeter to define Leduc pinnacle reefs: Canadian Petroleum, v. 10, no. 4, p. 32-34, illus., 1969.

265-391 **Southwood, D. J.** The hydromagnetic stability of the magnetospheric boundary: Planetary and Space Sci., v. 16, no. 5, p. 587-605, illus., 1968.

269-259 **Soviet Union State Geol. Comm.** Methods of prospecting and exploration applied in new oil and gas provinces in the Soviet Union, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 337-342, 1967.

269-261 **Soviet Union State Geol. Comm.** Exploration for oil and gas in the West Siberian Lowland, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 343-345, 1967.

266-324 **Sovorov, A. I.** Zakonomernosti stroyeniya i formirovaniya glubinnykh razlomov [Regularities of structure and formation of abyssal faults]: Akad. Nauk SSSR Geol. Inst. Trudy, no. 179, 216 p., illus., 1968.

274-259 **Sowerbutts, W. T. C.** Crustal structure of the East African plateau and rift valleys from gravity measurements: Nature, v. 223, no. 5202, p. 143-146, illus., 1969.

Sowinski, Kenneth P. See *Turkevich, Anthony L. 275-076*

Soyfer, V. N. See *Brezgunov, V. S. 267-364*

Soyfer, V. N. See *Pinneker, Ye. V. 269-384*

Soyfer, V. N. See *Alekseyev, F. A. 272-481*

272-320 **Sozou, C.; Windle, D. W.** A self consistent ring current in the Earth's dipole field: Planetary and Space Sci., v. 17, no. 3, p. 375-387, illus., tables, 1969.

275-305 **Sozou, D.; Windle, D. W.** Non-linear symmetric inflation of a magnetic dipole: Planetary and Space Sci., v. 17, no. 5, p. 999-1008, illus., tables, 1969.

Spadea, M. C. See *Caloi, Pietro. 265-187*

Spadea, M. C. See *Caloi, Pietro. 265-622*

270-481 **Spalding, Joe S.** Lithology determination from the micro-seismogram: Log Analyst, v. 9, no. 4, p. 3-7, illus., 1968.

269-328 **Spangler, Daniel P.; Libby, Fred J.** Application of the gravity survey method to watershed hydrology: Ground Water, v. 6, no. 6, p. 21-26, illus., table, 1968.

269-101 **Spannagel, G.; Sonntag, C.** Cosmic-ray-produced activities in chondrites, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 231-238, illus., tables, 1967.

269-140 **Special Correspondent.** First look at the Apollo 8 pictures: Nature, v. 221, no. 5177, p. 215-217, illus., 1969.

Spektor, Yu. I. See *Afanasenko, M. P. 274-196*

Spencer, R. L. See *Choate, R. 268-079*

Sperling, F. B. See *Choate, R. 268-079*

266-377 **Spetzler, Hartmut; Anderson, Don L.** The effect of temperature and partial melting on velocity and attenuation in a simple binary system: Jour. Geophys. Research, v. 73, no. 18, p. 6051-6060, illus., 1968.

Spevak, Yu. A. See *Gavrilov, Ye. Ya. 267-365*

264-205 **Spiess, F. N.** Underwater acoustic positioning—Applications, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 93-101, illus., 1967.

Spiess, Fred N. See *Larson, Roger L. 268-430*

Spiker, Elliott. See *Marsters, Beverly. 271-018*

Spiridonov, V. P. See *Blankov, Ye. B. 272-563*

267-389 **Spreiter, John R.; Alksne, Alberta Y.** Comparison of theoretical predictions of the flow and magnetic fields exterior to the magnetosphere with the observations of Pioneer 6: Planetary and Space Sci., v. 16, no. 8, p. 971-979, illus., 1968.

271-333 **Spreiter, John R.; Alksne, Alberta Y.** Effect of neutral sheet currents on the shape and magnetic field of the magnetosphere tail: Planetary and Space Sci., v. 17 no. 2, p. 233-246, illus., 1969.

272-307 **Spreiter, John R.; Alksne, Alberta Y.** Plasma flow around the magnetosphere, *in* Internat. symposium on the physics of the magnetosphere, Washington, D. C., 1968 invited papers: Rev. Geophysics, v. 7, nos. 1-2, p. 11-50, illus., 1969.

266-174 **Springer, D.; Denny, M.; Healy, J.; Mickey, W.** The Sterling experiment—Decoupling of seismic waves by a shot-generated cavity: Jour. Geophys. Research, v 73, no. 18, p. 5995-6011, illus., tables, 1968.

Sprintsson, V. D. See *Gerling, E. K. 269-067*

272-187 **Sproll, Walter P.; Dietz, Robert S.** Morphological continental drift fit of Australi and Antarctica: Nature, v. 222, no. 5191, p. 345-348, illus., 1969.

Srebrodolskiy, D. M. See *Alekseyev, F. A. 267-628*

Srivastava, B. J. See *Babu, Rao, V. 267-402*

Srivastava, B. J. See *Sanker Narayan, P. V. 271-338*

Srivastava, J. P. See *Nath, Mukti. 272-111*

Staatz, M. H. See *Tabor, R. W. 264-003*

265-292 **Stacey, F. D.** Energy balance of mantle convection: Tectonophysics, v. 5, no. 4, p. 441-445, 1968.

Stacey, F. D. See *Bhathal, R. S. 273-374*

Stacey, J. M. See *Reber, E. E. 275-057*

271-325 **Stacey, J. S.; Zartman, R. E.; NKomo, I. T.** A lead isotope study of galenas and selected feldspars from mining districts in Utah: Econ. Geology, v. 63, no. 7, p. 796-814, illus., tables, 1968.

266-412 **Stahl, Wolfgang.** Klarung der Genese nordwestdeutscher Erdgase durch C-13/C-12 Isotopenanalysen [Clarification of the origin of northwest German natural gases by means of C-13:C-12 isotope analyses]: Naturwissenschaften, v. 55, no. 6, p. 296, illus., table, 1968.

270-251 **Stahl, Wolfgang.** Search for natural variations in calcium isotope abundances: Earth and Planetary Sci. Letters, v. 5, no. 3, p. 171-174, illus., tables, 1969.

268-359 **Stahl, Wolfgang Josef.** Zur Herkunft norddeutscher Erdgase [On the origin of north German natural gas (with English summ.)]: Erdol u. Kohle, v. 21, no. 9, p. 514-518, illus., tables, 1968.

268-163 **Stakhovskaya, Z. I.** Vliyaniye poristosti na izmeneniye uprugikh i prochnostnykh svoystv gornykh porod pri raznykh davleniyakh [Effect of porosity on variations in elastic and strength properties of rocks at different pressures], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 140-142, illus., 1968.

Staklo, A. V. See *Gubarenko, L. A. 267-263*

272-021 **Stalker, A. MacS.** Geology of the terraces at Cochrane, Alberta: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1455-1466, illus., table, 1968.

266-267 **Stanford Univ. School Earth Sci.; U.S. Geological Survey; Dickinson, William R.; Grantz, Arthur.** (editors). Proceedings of conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967: Stanford Univ. Pubs. Geol. Sci., v. 11, 374 p., illus., tables, 1968.

Stange, L. See *Arnold, K. 265-320*

273-492 **Stanley, Daniel J.; Swift, Donald J. P.** Bermuda's reef-front platform—Bathymetry and significance: Marine Geology, v. 6, no. 6, p. 479-500, illus., 1968.

273-115 **Stanley, Kirk W.** Effects of the Alaska earthquake of March 27, 1964 on shore processes and beach morphology: U.S. Geol. Survey Prof. Paper 543-J, p. J1-J21, illus., 1968.

Stanyukovich, K. P. See *Mukhamedzhanov, A. K. 267-094*

264-531 **Stapledon, D. H.** Discussion of D. F. Coates' paper "Classification of rock substances" [1966]: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 4, p. 371-373, tables, 1968.

275-354 **Starik, I. Ye.; Kuznetsov, Yu. V.; Petryayev, Ye. P.; Legin, V. K.** Nekotoryye voprosy geokhimii radioaktivnykh izotopov [Some problems of the geochemistry of radioactive isotopes], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 374-389, illus., tables, 1963.

Starikov, V. N. See *Dyadkin, I. G. 268-638*

Starikov, V. N. See *Dyad'kin, I. G. 275-438*

Starkhov, G. V. See *Fel'dshteyn, Ya. I. 265-402*

274-335 **Starkov, G. V.; Fel'dshteyn, Ya. I.** Influence of the ring current on the position of the auroral oval: Geomagnetism and Aeronomy, v. 8, no. 6, p. 854-858, illus., 1968.

Starobinets, A. Ye. See *Amurskiy, G. I. 269-273*

Starobinets, A. Ye. See *Dikenshteyn, G. Kh. 269-635*

Starobinets, A. Ye. See *Mikhaylitskiy, Yu. P. 269-653*

Starobinets, M. Ye. See *Amurskiy, G. I. 269-273*

Starostenko, V. I. See *Dyadyura, V. A. 268-203*

271-295 **Starostenko, V. I.** Pro hravītatsīyne pole horyzontal'noho skīnchennoho kruhovoho tsylīndra [On the gravity field of a horizontal finite circular cylinder (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 4, p. 342-344, 1968.

271-297 **Starostenko, V. I.** Analītychnyy rozv'yazok pryamoyi zadachī hravimetrīyī dlya tīla skladnoyi formy u vypadku līnīynoyi zminy nadlyshkovoyi hustyny z hlybynoyu [Analytical solution of the direct problem of gravimetry for a body of complex shape in the case of linear variation of density contrast with depth (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 6, p. 533-536, illus., 1968.

271-298 **Starostenko, V. I.** Analītychnyy rozv'yazok pryamoyi zadachī hravīmetrīyi dlya skīnchennoho odnoridnoho horyzontal'noho kruhovoho tsylīndra [Analytical solution of the direct problem of gravimetry for a finite homogeneous horizontal circular cylinder (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 7, p. 608-611, 1968.

267-321 **Starovoyt, O. E.; Savarenskiy, Ye. F.; Fedorov, S. A.** The structure of the Earth's mantle and observations of long-period surface waves: Gerlands Beitr. Geophysik, v. 77, no. 3, p. 205-214, illus., tables, 1968.

271-100 **Starovoyt, O. Ye.** Ob opredelenii nekotorykh parametrov ochaga tsunamigennogo zemletryaseniya 13 oktyabrya 1963 g. po dlinno-periodnym volnam Releya [On the determination of some parameters of the focus of the tsunami-generating earthquake of October 13, 1963, according to long-period Rayleigh waves], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 133-140, illus., table, 1968.

Stashkov, G. M. See *Shavlo, S. G. 274-281*

268-109 **Stauder, William.** Tensional character of earthquake foci beneath the Aleutian trench with relation to sea-floor spreading: Jour. Geophys. Research, v. 73, no. 24, p. 7693-7701, illus., table, 1968.

268-596 **Stavrogin, A. N.** O vliyanii deformatsiya na pronitsayemost' gornykh porod [On the effect of deformation on the permeability of rocks], *in* Simposium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 156-161, illus., 1968.

269-347 **Stearns, Charles R.** Application of Lettau's theoretical model of thermal diffusion to soil profiles of temperature and heat flux: Jour. Geophys. Research, v. 74, no. 2, p. 532-541, illus., tables, 1969.

273-242 **Stearns, D. W.** Fracture as a mechanism of flow in naturally deformed layered rocks, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 79-90, illus., table; discussion, p. 91-95, 1969.

273-074 **Stearns, Richard G.; Wilson, Charles W., Jr.; Tiedemann, Herbert A.; Wilcox, John T.; Marsh, Phyllis S.** The Wells Creek structure, Tennessee, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 323-337, illus., 1968.

265-453 **Steenland, Nelson C.** Discussion on "The geomagnetic gradiometer" by H. A. Slack, V. M. Lynch, and L. Langan (Geophysics, October 1967, p. 877-892): Geophysics, v. 33, no. 4, p. 680-683, illus., 1968.

269-326 **Steenland, Nelson C.** Structural significance and analysis of Mid-Continent gravity high—Discussion [of paper by R. L. Coons and others, 1967]: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 11, p. 2263-2264, illus., 1968.

Stefănescu, Ruxandra. *See Visarion, M. 271-291*

Stefani, G. See *Cataldi, R. 267-292*

Stefankevich, Z. B. See *Avchyan, G. M. 267-151*

Stefankevich, Z. B. See *Avchyan, G. M. 268-167*

264-545 **Stefanon, Antonio.** Alcuni moderni strumenti per la raccolta di campioni di fondo marino [Some modern instruments for collecting samples from the sea bottom]: Ricerca Sci. Quaderni, no. 39, 28 p., ,illus., 1967.

269-444 **Sefanović, Dargoljub.** The remanent magnetization of igneous rocks: [Yugoslavia. Zavod. Geol. i Geofiz. Istraživanja Vesnik Primen. Geofizika, Ser. C., nos. 4-5, 1963-64, English edition, p. 123-184, illus., tables, 1966.

Stefansson, R. See *Bath, Markus. 265-119*

Stegena, Laszlo. See *Bisztricsany, Ede. 274-214*

Stehli, F. G. See *Helsley, Charles E. 268-404*

269-430 **Stehli, Francis G.** A paleoclimatic test of the hypothesis of an axial dipolar magnetic field, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 195-207, illus., tables, 1968.

Steiger, R. H. See *Hart, S. R. 267-013*

Steiger, R. H. See *Wasserburg, G. J. 269-041*

Steiger, R. H. See *Tilton, G. R. 273-001*

269-467 **Stein, Jerzy; Stopinski, Aleksander.** Anomalie magnetyczne składowej pionowej w okolicach Starachowic i Słupi Nowej [Magnetic anomalies with vertical component in the regions of Starachowice and Słupia Nowa (with English and Russian abs.)]: Przegląd Geol., v. 16, no. 2(179), illus., 1968.

Steinbacher, R. H. See *Jaffe, L. D. 267-075*

268-076 **Steinbacher, R. H.; Jaffe, L. D.** Introduction, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 1-4, illus., 1968.

Steinbacher, R. H. See *Jaffe, L. D. 275-069*

266-062 **Steinberg, Genrich S.** Inapplicability of Baldwin's relation for determining the causes of formation of lunar craters: Jour. Geophys. Research, v. 73, no. 18, p. 6125-6132, illus., tables, 1968.

Steinbrecher, D. H. See *Ewen, H. I. 270-100*

273-118 **Steinbrugge, Karl V.** Earthquake hazard in the San Francisco Bay area—A continuing problem in public policy: Berkeley, Calif., California Univ. Inst. Governmental Studies, 80 p., illus., tables, 1968.

272-231 **Steiner, Ferenc.** Beitrag zur Scheffer-Hypothese [Contribution to the Scheffer hypothesis]: Freiberger Forschungshefte C 238, p. 7-11, illus., 1968.

274-260 **Steiner, Franz.** Die Zielsetzung einer allgemeinen quantitativen Methode in der Gravimetrie [The goal-setting of a general quantitative method in gravimetry (with English abs.)]: Pure and Appl. Geophysics, v. 73, p. 5-18, illus., 1969.

Steiner, Maureen B. See *Helsley, Charles E. 272-353*

273-306 **Steinhart, J. S.; Hart, S. R.; Smith, T. J.** Heat flow: Carnegie Inst. Washington Year Book 67, p. 360-367, illus., 1969.

267-582 **Steinmann, W.; Ruhmkorf, H. A.** Seismische Messungen zur Salzstockflankenbestimmung—Eine Case History [Seismic measurements for the determination of salt dome flanks—A case history (with English summ.)]: Zeitschr. Geophysik, v. 34, no. 5, p. 457-468, illus., 1968.

Steinnes, E. See *Michelsen, O. B. 266-501*

274-008 **Steinthorsson, Sigurdhur.** Tvaer nyjar C^{14}-aldursakvardhanir a oskulogum ur Snaefellsjokli [Two new C-14 ages on peat from Snaefellsjokull (with English abs.)]: Natturufraedhingurinn, v. 37, nos. 3-4, p. 236-238, illus., table, 1968.

Stelcl, Jindřich. See *Hrouda, Frantisek. 274-362*

Stellmacher, I. See *Kovalevsky, J. 271-166*

Stenberg, A. See *Olsson, I. U. 269-029*

275-304 **Stening, R. J.** An assessment of the contributions of various tidal winds to the Sq current system: Planetary and Space Sci., v. 17, no. 5, p. 889-908, illus., tables, 1969.

272-176 **Stenzel, Przemyslaw.** Zastosowanie metody odejmowania pol do badan geoelektrycznych wykonywanych dla geologii inzynierskiej i hydrogeologii [Application of the method of subtraction of the fields for geoelectric surveys made for engineering-geological and hydrogeological purposes (with English and Russian abs.)]: Przeglad Geol., v. 17, no. 1(189), p. 24-30, illus., table, 1969.

Stepanov, A. I. See *Ovchinnikov, L. N. 265-048*

Stepanov, A. I. See *Dunayev, V. A. 267-043*

271-569 **Stepanov, A. I.; Sinamati, M. E.** Nekotoryye zakonomernosti v rasprostranenii kollektorov produktivnykh gorizontov na territorii Salymskogo i Surgutskogo neftenosnykh rayonov [Some regularities in the distribution of reservoirs in the producing horizons in the territory of the Salym and Surgut oil regions]: Neftegazovaya Geologiya i Geofizika, no. 11, p. 10-15, illus., 1968.

Stepanov, A. P. See *Filatov, A. I. 270-284*

Stepanov, B. S. See *Krasyukov, V. A. 271-154*

270-419 **Stepanov, V. Ya.** Anizotropiya uprugikh svoystv gornykh porod i yeye vliyaniye na napryazhennoye sostoyaniye massiva vblizi vyrabotki ellipticheskogo secheniya [Anisotropy of elastic properties of rocks and its effect on the stress state of a massif near an excavation with elliptical cross-section], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 22-31, tables, 1967.

273-055 **Stephens, D. R.; Lilley, E. M.** Static P-V curves of cracked and consolidated earth materials to 40 kilobars, *in* Shock metamorphism of natural materials, 1st Conf., Greenbelt, Md., 1966, Proc.: Baltimore, Md., Mono Book Corp., p. 51-57, illus., tables, 1968.

Stephens, J. R. See *Marshall, G. E. 264-093*

266-265 **Stephens, N.** Late-glacial and postglacial shorelines in Ireland and southwest Scotland [with German abs.], *in* Means of correlation of Quaternary successions—Internat. Assoc. Quaternary Research, 7th Cong., USA, 1965, Proc., V. 8: Salt Lake City, Utah, Univ. Utah Press, p. 437-456, illus., 1968.

270-079 **Stephenson, W. R.** Inangahua earthquake—Engineering seismology, *in* Preliminary reports on the Inangahua earthquake, New Zealand, May 1968: New Zealand Dept. Sci. and Indus. Research Bull. 193, p. 37-39, illus., 1968.

Stern, T. W. See *Lee, Donald E. 269-009*

Stetsyak, M. S. See *Kapkanshchikova, I. A. 266-579*

Stetsyak, M. S. See *Davidenko, F. K. 275-452*

Stetsyakh, M. S. See *Davidenko, F. K. 264-589*

268-393 **Steuerwald, B. A.; Clark, D. L.; Andrew, J. A.** Magnetic stratigraphy and faunal patterns in Arctic Ocean sediments: Earth and Planetary Sci. Letters, v. 5, no. 2, p. 79-85, illus., 1968.

267-010 **Steven, Thomas A.; Epis, Rudy C.** Oligocene volcanism in south-central Colorado, *in* Cenozoic volcanism in the southern Rocky Mountains: Colorado School Mines Quart., v. 63, no. 3, p. 241-258, 1968.

Stevens, Anne E. See *Kasahara, Keichi. 275-105*

Stevens, N. C. See *Webb, A. W. 266-040*

Stevens, R. D. See *Aumento, F. 265-003*

Stevens, R. D. See *Wanless, R. K. 267-019*

266-280 **Stewart, Samuel W.** Preliminary comparison of seismic traveltimes and inferred crustal structure adjacent to the San Andreas fault in the Diablo and Gabilan Ranges of central California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 218-229, illus.; discussion, p. 230, 1968.

Stickland, A. C. See *Lincoln, J. V. 268-385*

272-326 **Stickland, A. C.** (editor). Annals of the IQSY—V. 3, The proton flare project (the July 1966 event): Cambridge, Mass., and London, England, M. I. T. Press, 511 p., illus., tables, 1969.

Stieff, Lorin R. See *Hewett, D. F. 272-006*

272-148 **Stiller, H.; Wagner, C.** Eine Einrichtung fur Ultraschallmessungen an Gesteinen unter hydrostatischen Druck bis 2 kbar [A device for ultrasonic measurements on rocks under hydrostatic pressure to 2 kb (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 1, p. 97-101, illus., 1969.

Stimpson, L. D. See *Lucas, J. W. 275-074*

267-159 **Stingelin, Ronald W.; Fisher, Wilson, Jr.** Advancements in airborne infrared imaging techniques, *in* American Water Resources Conf., 3d Ann., San Francisco, Calif., 1967, Proc.: Am. Water Resources Assoc. Proc. Ser., no. 3, p. 466-471, illus., 1967.

270-104 **Stingelin, Ronald W.** Invited comments—Line scan devices and why to use them, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 103-105, illus., 1968.

268-048 **Stipe, J. Gordon.** Iron meteorites as mascons: Science, v. 162, no. 3860, p. 1402-1403, table, 1968.

Stipp, J. J. See *McDougall, Ian. 264-027*

Stipp, J. J. See *Ewart, A. 264-314*

Stipp, J. J. See *Polach, H. A. 265-010*

267-033 **Stipp, J. J.; McDougall, I.** Potassium-argon ages from the Nandewar Volcano, near Narrabri, New South Wales: Australian Jour. Sci., v. 31, no. 2, p. 84-95, tables, 1968.

274-020 **Stipp, J. J.; McDougall, Ian.** Geochronology of the Banks Peninsula volcanoes, New Zealand: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1239-1260, illus., tables, 1968.

Stockard, H. P. See *Zietz, Isidore. 265-456*

Stockard, Henry. See *Drake, Charles L. 265-348*

273-023 **Stockwell, C. H.** Geochronology of stratified rocks of the Canadian Shield, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 693-698, illus., table, 1968.

275-168 **Stoenescu, Scarlat; Airnei, Ştefan.** Evolution, etat actuel, orientations nouvelles de l'etude geophysique du territoire de la Roumanie [Evolution, actual state, new orientâtiona of geophysical study of the territory of Rumania (with English abs.)]: România Com. Stat Geologiei Anuarul, v. 36, p. 239-254, illus., 1968.

Stöffler, D. See *Engelhardt, W. von. 273-064*

Stöffler, D. See *Engelhardt, W. von. 273-084*

274-044 **Stöffler, D.; Arndt, J.** Coesit und stishovit—Hochstdruckmodifikationen des Siliciumdioxids [Coesite and stishovite—The highest pressure modifications of silicon dioxide]: Naturwissenschaften, v. 56, no. 3, p. 100-109, illus., table, 1969.

Stolyar, L. N. See *Safarov, I. P. 264-596*

271-513 **Stone, D. B.** Geophysics in the Bering Sea and surrounding areas—A review: Tectonophysics, v. 6, no. 6, p. 433-460, illus., 1968.

264-341 **Stone, D. J.** Automatic calculation of daily ionospheric current systems: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 127-136, illus., 1968.

Stone, Jerome. See *Hewett, D. F. 272-006*

Stoner, J. O., Jr. See *Daehler, Mark. 264-049*

272-081 **Stoney, W. E., Jr.** The role of manned orbiting laboratories in the exploration of the planets, *in* Use of space systems for planetary geology and geophysics—AAS Symposium, Boston, Mass., 1967, Proc.: Tarzana, Calif., Am. Astronaut. Soc. (AAS Sci. and Technology Ser., V. 17), p. 377-391, illus., table, 1968.

Stopinski, Aleksander. See *Stein, Jerzy. 269-467*

264-388 **Storetvedt, K. M.** On remagnetization problems in palaeomagnetism: Earth and Planetary Sci. Letters, v. 4, no. 2, p. 107-112, illus., 1968.

265-439 **Storetvedt, K. M.; Halvorsen, E.; Gjellestad, G.** Thermal analysis of the natural remanent magnetism of some Upper Silurian red sandstones in the Oslo region: Tectonophysics, v. 5, no. 5, p. 413-426, illus., 1968.

266-463 **Storetvedt, K. M.; Halvorsen, E.** On the palaeomagnetic reliability of the Scottish Devonian lavas: Tectonophysics, v. 5, no. 6, p. 447-457, illus., table, 1968.

268-406 **Storetvedt, K. M.; Gidskehang, A.** Palaeomagnetism and the origin of the Egersund dolerites, S. Norway: Norsk Geol. Tidsskr., v. 48, nos. 1-2, p. 121-125, illus., table, 1968.

268-407 **Storetvedt, K. M.** The permanent magnetism of some basin intrusions in the Kragero archipelago, S. Norway, and its geological implications: Norsk Geol. Tidsskr., v. 48, no. 3, p. 153-163, illus., tables, 1968.

Stotzel-Riezler, W. See *Charalambus, S. 272-061*

Stovas, G. M. See *Tyapkin, K. F. 271-258*

Stovas, M. V. See *Samarskiy, R. Ya. 274-250*

Stover, C. W. See *Brazee, R. J. 274-103*

Stoykiy, V. M. See *Filatov, A. I. 270-284*

266-306 **Stoyko, Anna.** Mouvement seculaire du pole et la variation des latitudes des stations du SIL [Secular movements of the pole and the variation of the latitudes of the International Latitude Service (with English and Russian abs.)], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 52-56, illus., tables, 1968.

266-307 **Stoyko, Nicolas.** Variation seculaire des longitudes [Secular variations of longitude (with English and Russian abs.)], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 57-62, illus., tables, 1968.

266-356 **Strakhov, V. N.** K teorii obratnoy zadachi gravimetrii dlya sloistykh sred [On the theory of the inverse problem of gravimetry for layered mediums]: Akad. kad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 3, p. 74-89, illus., 1968.

Strakhov, V. N. See *Lebedev, T. S. 275-194*

Strangway, D. See *Larson, E. 273-379*

266-451 **Strangway, D. W.; Honea, R. M.; McMahon, B. E.; Larson, E. E.** The magnetic properties of naturally occurring goethite: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 345-359, illus., tables, 1968.

Strangway, D. W. See *Larson, E. E. 266-454*

Strangway, D. W. See *Larson, E. E. 271-361*

267-435 **Strangway, David W.; McMahon, B. E.; Larson, E. E.** Magnetic paleointensity studies on a Recent basalt from Flagstaff, Arizona: Jour. Geophys. Research, v. 73, no. 22, p. 7031-7037, illus., tables, 1968.

274-448 **Strasser, Bernd.** Mechanisches Verhalten von Sedimentgesteinen aus dem Karbon Nordrhein-Westfalens unter Einfluss allseitigen Drucks [Mechanical behavior of sedimentary rocks from the Carboniferous of Northrhine-Westphalia under the influence of universal pressure (with English and French abs.)], *in* Beitrage zur Ingenieurgeologie—A symposium: Fortschr. Geologie Rheinland u. Westfalen, v. 15, p. 1-130, illus., tables, 1968.

274-449 **Strasser, Bernd; Wolters, Richard.** Uber den Einfluss allseitigen Drucks, erhohter Temperatur und schwellender Belastung auf das mechanische Verhalten von Sedimentgesteinen [On the influence of universal pressure, elevated temperature, and increasing load on the mechanical behavior of sedimentary rocks (with English and French abs.)], *in* Beitrage zur Ingenieurgeologie—A symposium: Fortschr. Geologie Rheinland u. Westfalen, v. 15, p. 131-154, illus., tables, 1968.

Strecker, Ian. See *Crocker, Hugh. 272-546*

Strelow, F. W. E. See *Burger, A. J. 267-028*

271-337 **Střeštík, Jaroslav.** Properties of spectra of geomagnetic pi 2 pulsations recorded at the Budkov Observatory: Československá Akad. Věs Studia Geophys. et Geod., v. 13, no. 1, p. 42-59, illus., tables, 1969.

272-347 **Strestik, Jaroslav.** Some statistical regularities of geomagnetic Pi2 pulsations observed at the Budkov Observatory between 1961 and 1964 [with Czech and Russian abs.]: Ceskoslovenska Akad. Ved Geofys. Sbornik 1967, v. 15, p. 409-421, illus., tables, 1968.

270-355 **Stride, A. H.; Curray, J. R.; Moore, D. G.; Belderson, R. H.** Marine geology of the Atlantic continental margin of Europe: Royal Soc. London Philos. Trans., ser. A, v. 264, no. 1148, p. 31-75, illus., table, 1969.

Stride, A. H. See *Belderson, R. H. 273-488*

Strizhov, V. I. See *Bagramyants, V. O. 268-280*

Strobach, K. See *Rower, P. 265-131*

274-407 **Strobach, Klaus.** Uber die Natur der elastischen Wellen der Seegangs-Mikroseismik [On the nature of the elastic waves of ocean-swell microseisms (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 2, p. 113-132, illus., 1969.

Strobel, Darrell F. See *McElroy, Michael B. 270-043*

Stroiteleva, A. V. See *Yesenov, Sh. Ye. 269-272*

Strong, I. B. See *Bame, S. J. 265-386*

Strong, I. B. See *Asbridge, J. R. 265-388*

Strong, P. F. See *Simon, I. 267-138*

Stroud, Lowell. See *Tully, P. C. 275-185*

264-268 **Stroyev, P. A.; Smirnov, L. P.; Luginets, A. P.** Rezul'taty morskikh ispytaniy nabortnykh gravimetrov MG-SZ-VNIIGeofizika [Results of sea tests of MG-SZ-VNIIGeofizika shipboard gravimeters]: Prikladnaya Geofizika, no. 50, p. 163-175, illus., tables, 1967.

264-270 **Stroyev, P. A.; Ushakov, S. A.; Frolov, A. I.** Zemnaya kora krayevoy zony Antarktidy [The Earth's crust in the border zone of Antarctica (with English abs.)]:

Akad. Nauk SSSR Mezhduvedomstv. Geofiz. Kom., Rezul'taty Issledovanii po Mezhdunarod. Geofiz. Proyektam, Gravimetriya, no. 6, 65 p., illus., tables, 1967.

Stroyev, P. A. See *Grushinskiy, N. P. 265-332*

Stroyev, P. A. See *Gaynanov, A. G. 266-245*

Stroyev, P. A. See *Gaynanov, A. G. 268-315*

275-248 **Stroyev, P. A.; Frolov, A. I.** Podlednyy rel'yef v rayone oazisa Shirmakhera [Subglacial relief in the Schirmacher Ponds region]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 59, p. 50-54, illus., 1966.

264-345 **Stuart, W. F.** Micropulsation activity at Lerwick: Jour. Atmos. and Terrest. Physics, v. 30, no. 3, p. 337-344, illus., 1968.

271-013 **Stuckenrath, Robert, Jr.; Lawn, Barbara.** University of Pennsylvania radiocarbon dates XI: Radiocarbon, v. 11, no. 1, p. 150-162, 1969.

267-296 **Studt, F. E.** Geophysics of Waiotapu area, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 35-41, illus., 1963.

267-302 **Studt, F. E.** Waiotapu hydrology, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 127-132, illus., 1963.

267-304 **Studt, F. E.** Summary of findings at Waiotapu, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 136-138, 1963.

274-297 **Stueber, Alan M.** Abundances of K, Rb, Sr and Sr isotopes in ultramafic rocks and minerals from western North Carolina: Geochim. et Cosmochim. Acta, v. 33, no. 5, p. 543-553, illus., table, 1969.

269-026 **Stuiver, M.** Origin and extent of atmospheric ^{14}C variations during the past 10,000 years, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 27-40, illus., tables, 1967.

267-339 **Stuiver, Minze.** Oxygen-18 content of atmospheric precipitation during last 11,000 years in the Great Lakes region: Science, v. 162, no. 3857, p. 994-997, illus., 1968.

Stuiver, Minze. See *Scholl, David Q. 269-005*

272-274 **Stupakov, Ye. P.** Avtomaticheskaya registratsiya kalibrovochnykh tochek pri vysokikh davleniyakh [Automatic registration of calibration points at high pressures]: Geokhimiya, no. 9, p. 1139-1140, illus., 1968.

Stupnikova, N. I. See *Apel'tsin, F. R. 267-038*

Stupnikova, N. I. See *Gerasimovskiy, V. I. 272-041*

268-617 **Sturiale, Carmelo.** A subterminal radial fissure eruption on Mt. Etna: Geol. Rundschau, v. 57, no. 3, p. 766-773, illus., table, 1968.

270-431 **Sturm, Rolland G.; Kaarsberg, Ernest A.** A deep-sea geophysical exploratory manned mobile submersible (deep-sea gemms) and its related programs, *in* Marine sciences instrumentation, V. 4—Instrument Soc. America Symposium, 4th Natl., Cocoa Beach, Fla., 1968, Proc.: New York, Plenum Press, p. 457-471, illus., 1968.

272-104 **Su, Sergio S.** The Luzon earthquake of 1 August 1968—A preliminary report: Seismol. Soc. America Bull., v. 59, no. 1, p. 459-472, illus., tables, 1969.

270-343 **Suarez Feito, Jose.** Prospeccion de minerales radiactivos [Prospecting for radioactive minerals]: Madrid, Escuela Tecnica Superior Ingenieros Minas, 206 p., illus., tables, no date.

Suarez, Manuel. See *Bosc, Paul. 274-428*

267-581 **Subbotin, S.; Sollogub, V.; Prosen, D.; Dragašević, T.; Mituch, E.; Posgay, K.** Crustal structure of southeastern Europe according to the data of deep seismic soundings: Boll. Geofisica Teor. ed Appl., v. 10, no. 39, p. 241-263, illus., 1968.

265-350 **Subbotin, S. I.; Sollogub, V. B.; Prosen, D.; Dragasevic, T.; Mituch, E.; Posgay, K.** Junction of deep structures of the Carpatho-Balkan region with those of the Black and Adriatic Seas, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 1027-1035, illus., 1968.

268-333 **Subbotin, S. I.; Sollogub, V. G.; Chekunov, A. V.; Chirvinskaya, M. V.; Turchanenko, N. T.; Garkalenko, I. A.** New data on crustal structure of the Ukraine, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 121-128, illus., 1968.

Subbotin, S. I. See *Chekunov. A. V. 269-369*

269-372 **Subbotin, S. I.; Sollogub, V. B.; Chekunov, A. V.; Chirvinskaya, M. V.; Turchanenko, N. T.; Garkalenko, I. A.** Novyye dannyye o stroyenii zemnoy kory Ukrainy (po geofizicheskim issledovaniyam) [New data on crustal structure of the Ukraine (according to geophysical investigations) (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5 Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p 15-21, illus., 1968.

Suda, Yoshiro. See *Matsuda, Takeo. 269-336*

Sudakov, P. A. See *Makarevich, K. G. 275-220*

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Sudbury, P. V. See *Mills, G. A. 269-128*

Sudo, Yasuaki. See *Wada, Tatsuhiko. 265-150*

268-199 **Suescun G., Dario.** Apuntes sobre la aplicación de la geofísica a la exploración d minerales [Notes on the application of geophysics to mineral exploration]: DYNA no. 85, p. 111-118, 1968.

Suess, H. See *Bien, G. 269-031*

Suess, H. E. See *Houtermans, J. 269-028*

Suess, H. E. See *Dockins, K. O. 269-033*

269-034 **Suess, H. E.** Bristlecone pine calibration of the radiocarbon time scale from 41 B.C. to 1500 B.C., *in* Radioactive dating and methods of low-level counting—IAE ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Ener Agency, p. 143-151, illus., table, 1967.

266-406 **Suess, Hans E.** Climatic changes, solar activity, and the cosmic-ray productio rate of natural radiocarbon, *in* Causes of climatic change—INQUA-NCAR Sympo um, Boulder, Colo., 1965 (INQUA, 7th Cong., 1965, Proc., V. 5): Meteorol. Mon v. 8, no. 30, p. 146-150, illus., 1968.

271-323 **Suess, Hans E.** Tritium geophysics as an international research project: Scienc v. 163, no. 3874, p. 1405-1410, illus., 1969.

Sugawa, C. See *Okuda, T. 266-304*

Suggate, R. P. See *Adams, R. D. 267-121*

268-018 **Suggate, R. P.** Post-glacial sea-level rise in the Christchurch metropolitan area, New Zealand: Geologie en Mijnbouw, v. 47, no. 4, p. 291-297, illus., table, 1968.

Suggate, R. P. See *Lensen, G. J. 270-078*

274-125 **Suggate, R. P.** Seismicity and structure in south-west New Zealand and the Macquarie Ridge: New Zealand Jour. Geology and Geophysics, v. 11, no. 5, p. 1274-1276, illus., 1968.

Sugimoto, D. See *Hayakawa, S. 268-056*

Sugimura, Arata. See *Miyamura, Setumi. 266-318*

267-316 **Sugimura, Arata.** Spatial relations of basaltic magmas in island arcs, *in* Basalts—The Poldervaart treatise on rocks of basaltic composition, V. 2 (H. H. Hess and A. Poldervaart, editors): New York and London, Interscience Publishers, p. 537-571, illus., tables, 1968.

273-264 **Sugimura, Arata.** Uniform rates and duration period of Quaternary earth movements in Japan, *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 25-34, illus., table, 1967.

269-083 **Sugimura, Yukio; Miyake, Yasuo.** Studies of a deep-sea core—V-20-130—Pt. 7, Ionium-thorium geochronology of the Lamont core—V-20-130—of the western North Pacific: [Tokyo] Natl. Sci. Mus. Bull., v. 11, no. 3, p. 327-332, illus., tables, 1968.

Sugimura, Yukio. See *Miyake, Yasuo. 270-019*

267-379 **Sugiura, M.; Skillman, T. L.; Ledley, B. G.; Heppner, J. P.** Propagation of the sudden commencement of July 8, 1966, to the magnetotail: Jour. Geophys. Research, v. 73, no. 21, p. 6699-6709, illus., 1968.

264-332 **Sugiura, Masahisa.** Rotation of the low-latitude DS field and westward drift of a partial ring current: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 23-27, illus., table, 1968.

273-360 **Sugiura, Masahisa; Nagata, Takesi.** The second Benedum symposium on Earth magnetism—November 23-25, 1964, University of Pittsburgh, Pittsburgh, Pennsylvania: Tokyo, Soc. Terrestrial Magnetism and Electricity, 223 p., illus., tables, 1966.

Sugrobov, V. M. See *Ivanov, V. V. 271-556*

Suh, J. H. See *Kim, C. S. 274-429*

Suh, Jung Hee. See *Kim, Chong Su. 267-462*

Sukhanov, A. L. See *Markov, M. S. 269-151*

266-368 **Sukharev, G. M.; Vlasova, S. P.; Taranukha, Yu. K.; Tsogoyev, V. B.** O povyshennoy plotnosti teplovogo potoka po skvazhine No. 36 Levoberezhnogo polimetallicheskogo mestorozhdeniya (tsentral'noye podpodnyatiye Kavkazkogo antiklinoriya) [On the high heat flow density along Well 36 in the Left Bank polymetallic deposit (central uplift of the Caucasus anticlinorium)]: Akad. Nauk SSSR Doklady, v. 181, no. 4, p. 960-963, illus., 1968.

268-306 **Sukharev, G. M.; Vlasova, S. P.; Taranukha, Yu. K.** Geotermicheskaya kharakteristika i teplofizicheskiye parametry mezo-kaynozoyskikh i dokembriysko-paleozoyskikh otlozheniy Bol'shogo Kavkaza i Predkavkaz'ya [Geothermal characteristics and thermophysical parameters of the Meso-Cenozoic and Precambrian-Paleozoic formations of the Greater Caucasus and Ciscaucasia], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 77-83, 1968.

Sulerzhitskiy, L. D. See *Cherdyntsev, V. V. 265-023*

Sulerzhitskiy, L. D. See *Cherdyntsev, V. V. 265-024*

Sulerzhitskiy, L. D. See *Cherdyntsev, V. V. 267-036*

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Sulin, V. V. See *Savosin, S. I. 272-480*

272-483 **Sulin, V. V.** Osnovnyye predposylki gamma-aktivatsionnogo metoda opredeleniya soderzhaniya ugleroda i kisloroda v obraztsakh iskopayemykh ugley [Fundamental premises of the gamma-activation method of determining the carbon and oxygen content in coal samples], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 244-255, illus., tables, 1968.

Sulin, V. V. See *Belov, V. I. 272-484*

Sulin, V. V. See *Berzin, A. K. 272-485*

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Sumner, J. S. See *Reford, M. S. 267-470*

275-188 **Sumner, John S.** Geophysics, geologic structures and tectonics: Wm. C. Brown Company Publishers (Brown Found. Earth Sci. Ser.), 115 p., illus., tables, 1969.

Sun, Shun-I. See *Nuzhnaya, E. M. 271-572*

267-080 **Suncombe, R. L.; Klepczynski, W. J.; Seidelmann, P. K.** Mass of Pluto: Science, v. 162, no. 3855, p. 800-802, illus., tables, 1968.

Sündermann, J. See *Brosche, P. 274-134*

Sun-Shun-I. See *Shterengrats, Ye. M. 267-586*

Supalak, Preecha. See *Soffel, Heinrich. 265-447*

Supko, P. R. See *Ball, M. M. 274-236*

266-343 **Suprunenko, O. I.; Dekin, G. P.** Ob osobennostyakh gravitatsionnogo polya Yuzhnoy Kamchatki [On the features of the gravity field of southern Kamchatka]: Akad. Nauk SSSR Doklady, v. 181, no. 4, p. 956-959, illus., 1968.

269-400 **Surdin, Maurice.** Sur l'origine du champ magnétique terrestre [On the origin of the terrestrial magnetic field]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 21, p. 1181-1184, illus., 1968.

265-469 **Surkov, A. D.** Graficheskiye sposoby opredeleniya elementov zaleganiya vertikal'nykh i uzkikh naklonnykh plastov po tret'im proizvodnym magnitnogo potentsiala [Graphic ways of determining the positional elements of narrow vertically inclined layers from the third derivatives of the magnetic potential]: Razved. Geofizika, no. 24, p. 77-82, illus., 1967.

266-357 **Surkov, V. S.** Tektonicheskiye struktury fundamenta Zapadno-Sibirskoy plity, osobennosti otobrazheniya ikh v gravitatsionnom i magnitnom anomal'nykh polyakh [Tectonic structure of the basement of the West Siberian plate, features of its reflection in the gravity and magnetic fields], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 49-58, 1967.

269-270 **Surkov, V. S.; Zhero, O. G.; Umantsev, D. F.** Geologicheskoye stroyeniye fundamenta Zapadno-Sibirskoy plity [Geologic structure of the basement of the West Siberian plate (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 80-87, illus., 1968.

Surkov, Yu. A. See *Vinogradov, A. P. 268-101*

Surprenant, N. F. See *McClaine, L. A. 264-549*

Süss, Manfred. See *Fischer, Wolfgang. 265-373*

269-693 **Sutcliffe, H., Jr.; Joyner, B. F.** Test well exploration in the Myakka River basin area, Florida: Florida Div. Geology Inf. Circ. 56, 61 p., illus., tables, 1968.

Sutter, J. E. See *Adams, J. A. S. 269-048*

266-116 **Sutton, D. J.; White, R. E.** The seismicity of South Australia: Geol. Soc. Australia Jour., v. 15, pt. 1, p. 25-32, illus., table, 1968.

272-106 **Sutton, D. J.** A note on phase shift in electromagnetic seismographs: Earthquake Notes, v. 39, nos. 3-4, p. 23-28, illus., 1968.

Sutton, D. J. See *Doyle, H. A. 274-124*

Sutton, G. See *Latham, G. 275-054*

264-028 **Sutton, John.** The extension of the geological record into the Pre-Cambrian: Geologists' Assoc. Proc. 1967, v. 78, pt. 4, p. 493-534, illus., table, 1968.

270-184 **Sutton, John.** Development of the continental framework of the Atlantic: Geologists' Assoc. Proc., v. 79, pt. 3, p. 275-303, illus., tables, 1968.

Sutuyev, A. B. See *Simkhayev, V. Z. 273-510*

Suvorov, A. A. See *Bikkenina, S. K. 268-313*

270-410 **Suvorov, A. A.; Tuyezov, I. K.; Zhil'tsov, E. G.; Alekseyev, B. V.; Kulikov, A. A.** Rezul'taty glubinnogo seysmicheskogo zondirovaniya zemnoy kory v severnoy chasti Yaponskogo morya [Results of deep seismic sounding of the Earth's crust in the northern part of the Japan Sea (with English summ., p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 59-67, illus., 1968.

Suvorov, A. D. See *Alekseyev, V. V. 268-626*

Suvorov, A. D. See *Alekseyev, V. V. 269-591*

Suvorov, V. D. See *Krylov, S. V. 269-658*

Suvorov, Yu. P. See *Krasnoshchekov, P. S. 267-182*

Suvorova, L. V. See *Zander, V. N. 265-306*

269-241 **Suyama, Junji.** Utilization of geo-electrical prospecting in exploration for gas and oil, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: United Nations ECAFE Mineral Resources Devel. Series, no. 26, p. 549-550, 1967.

Suzuki, Akira. See *Maeda, Hiroshi. 265-417*

Suzuki, Isao. See *Kasahara, Junzo. 272-161*

Suzuki, Isao. See *Kasahara, Junzo. 272-162*

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Suzuki, Shuzo. See *Horibe, Tomio. 265-669*

271-561 **Suzuki, Takasuke.** Settlement of volcanic cones [in Japanese with English abs.] Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 2, p. 95-108, illus., tables, 1968.

Suzuki, Tomisaburo. See *Kanai, Kiyoshi. 266-135*

Suzuki, Tomisaburo. See *Kanai, Kiyoshi. 266-140*

Suzuki, Tomisaburo. See *Kanai, Kiyoshi. 266-141*

275-147 **Suzuki, Toru; Yokoyama, Takeo.** On the geophysical prospecting of oversea metal mines—Pt. 4, Case history of an induced polarization method on "porphyr copper" type deposits in British Columbia, Canada [in Japanese with English abs. Butsuri-Tanko, v. 21, nos. 5-6, p. 297-304, illus., 1968.

271-074 **Suzuki, Yasumoto.** Earthquake generating stress and recent crustal deformatio in central Japan [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 19, n 8, p. 519-528, illus., 1968.

Svitoch, A. A. See *Zhuravlev, V. S. 265-644*

271-250 **Svitoch, A. A.** Osobennosti izucheniya neotektoniki tsentral'noy chas Prikaspiyskoy vpadiny [Features of the study of the neotectonics of the central pa of the Caspian basin], *in* Problemy tektonicheskikh dvizheniy i noveyshikh strukt zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," 191-195, 1968.

271-220 **Svyatlovskiy, A. Ye.** Dinamika, struktura i energetika sovremennykh v kanicheskikh poyasov Zemli [Dynamics, structure, and energy of recent volcan belts of the Earth (with English summ.)], *in* Internat. Geol. Cong., 23d, Pragu 1968, Doklady Sovet. Geologov, Prob. 2, Vulkanizm i Tektogenez: Moscow, datel'stvo "Nauka," p. 229-230, illus., 1968.

Swainbank, I. G. See *Hills, F. Allan. 267-006*

Swanson, Mary F. See *Fisher, David E. 266-048*

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Swift, C. M., Jr. See *Vozoff, K. 274-178*

269-607 **Swift, Donald J. P.; Lyall, Anil K.** Origin of the Bay of Fundy, an interpretati from sub-bottom profiles: Marine Geology, v. 6, no. 4, p. 331-343, illus., 1968.

Swift, Donald J. P. See *Stanley, Daniel J. 273-492*

270-160 **Swindon, V. G.** Case history—Roma area: APEA Jour., v. 8, pt. 2, p. 120-129, illus., 1968.

274-060 **Swings, Pol.** Venus through a spectroscope, *in* The planet Venus—Past, present, and future—Symposium commemorating the Society's participation in observations of a Transit of Venus, June 3, 1769, Philadelphia, 1968: Am. Philos. Soc. Proc., v. 113, no. 3, p. 229-246, tables, 1969.

Sychev, P. M. See *Tuyezov, I. K. 266-402*

Sychev, P. M. See *Tuyezov, I. K. 268-320*

273-273 **Sychev, P. M.** Anomalii sily tyazhesti i prichiny vertikal'nykh dvizheniya zemnoy kory v zone perekhoda ot Aziatskogo kontinenta k Tikhomu okeanu [Gravity anomalies and causes of vertical crustal movements in the zone of transition from the Asiatic continent to the Pacific Ocean]: Geotektonika, no. 1, p. 13-25, illus., 1969.

268-274 **Sycheva, M. V.** Paletki, ne trebuyushchiye znaniya nulevogo urovnya polya, dlya interpretatsii anomaliy sily tyazhesti ot dvukhmetnykh tel pravil'noy formy [Master curves that do not require knowing the zero level of the field, for interpretation of gravity anomalies from two-dimensional bodies of regular shape], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 73-75, illus., 1967.

265-369 **Syers, J. K.; Chapman, S. L.; Jackson, M. L.; Rex, R. W.; Clayton, R. N.** Quartz isolation from rocks, sediments and soils for the determination of oxygen isotopes composition: Geochim. et Cosmochim. Acta, v. 32, no. 9, p. 1022-1025, illus., 1968.

Syers, J. K. See *Rex, R. W. 269-376*

Sykes, Lynn R. See *Isacks, Bryan. 266-256*

Sykes, Lynn R. See *Banghar, A. R. 269-180*

269-297 **Sykes, Lynn R.** Seismological evidence for transform faults, sea floor spreading, and continental drift, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966 Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 120-150, illus., tables, discussion, 1968.

Sykes, Lynn R. See *Isacks, Bryan. 274-229*

275-088 **Sykes, Lynn R.; Isacks, Bryan L.; Oliver, Jack.** Spatial distribution of deep and shallow earthquakes of small magnitudes in the Fiji-Tonga region: Seismol. Soc. America Bull., v. 59, no. 3, p. 1093-1113, illus., tables, 1969.

Sykes, Lynn R. See *Isacks, Bryan. 275-103*

275-200 **Sylvester, Arthur G.** A microfabric study of calcite, dolomite, and quartz around Papoose Flat Pluton, California: Geol. Soc. America Bull., v. 80, no. 7, p. 1311-1327, illus., tables, 1969.

270-185 **Sylvester-Bradley, P. C.** Tethys—The lost ocean: Sci. Jour., v. 4, no. 9, p. 47-53, illus., 1968.

273-378 **Symons, D. T. A.** Geological implication of paleomagnetic studies in the Bella Coola and Laredo Sound map-areas, British Columbia (93D and 103A): Canada Geol. Survey Paper 68-72, 15 p., illus., tables, 1969.

Symons, D. T. A. See *Schwarz, E. J. 275-330*

Syono, Yasuhiko. See *Kushiro, Ikuo. 266-376*

Syono, Yasuhiko. See *Akimoto, Syun-iti. 271-310*

267-369 **Syromyatnikov, N. G.; Ivanova, E. I.** Radiologicheskoye izucheniye granito
massiva Ortau (Tsentral'nyy Kazakhstan) [Radiologic study of the granites of th
Ortau massif (Central Kazakhstan) (with English summm.)]: Geokhimiya, no. 3, p
315-322, illus., tables, 1968.

Syuzyumov, L. M. See *Kirillov, V. A. 268-185*

Szabadváry, László. See *Kiraly, Erno. 265-240*

264-249 **Szabo, B.** Ocean gravity surveys with airborne systems, *in* Marine geodesy sym
posium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D. C., U.S. Governmen
Printing Office, p. 201-204, illus., table, 1967.

270-508 **Szabó, János; Somlyay, Zoltán; Székely, Endre; Tirkala, Ferenc; Virág, Péter.**
gamma-gamma szelvenyezés feladatai a mecseki ércbányászatban [Problems
gamma-gamma profiling in ore mining in the Mecsek (with Russian and Germa
summ.)]: Magyar Geofizika, v. 9, no. 6, p. 237-240, illus., tables, 1968.

265-324 **Szabó, Zoltán.** A földkéreg felső részének gravitációs adatokból számított s
rűsege [Density of the upper part of the Earth's crust calculated from gravity dat
(with Russian and German summ.)]: Magyar Geofizika, v. 9, no. 1, p. 35-38, illus
table, 1968.

Szalay, Emö. *See Marton, Peter. 270-276*

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270-380 **Szanyi, Bela.** Szeizmikus reflexios idoszelvenyek a Vasvar-Kormend-Zalaege
szeg kutatasi teruleten [Seismic reflection time profiles in the Vasvar-Kermen
Zalaegerszeg investigated region (with Russian and German summ.)]: Magy
Geofizika, v. 9, nos. 4-5, p. 126-128, illus., 1968.

Szekely, Endre. See *Szabo, Janos. 270-508*

266-490 **Szemeredy, Pal.** A protonprecesszion alapulo meresek alapjai [The principles
measurements based on proton precession (with Russian and German summ.)
Magyar Geofizika, v. 9, no. 3, p. 81-98, illus., 1968.

270-502 **Szemeredy, Pal.** A protonprecesszios lyukszelvenyezes [Proton precessio
logging (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 12
125, illus., 1968.

270-507 **Szilagyi, Endre.** Az agyag- es aleurit-frakcio szerepe az algyoi felso pannon
tarolo kozetek kozetfizikai tulajdonsagainak kialakitasaban [The role of the clay a
silt fraction in the formation of the petrophysical properties of the Upper Pannoni
reservoir rocks of Algyo (with Russian and German summ.)]: Magyar Geofizika, v.
no. 6, p. 201-223, illus., tables, 1968.

Szulyovszky, Imre. See *Hegymegi, Laszlo. 200-013*

Szulyovszky, Imre. See *Hagymegi, Laszlo. 270-281*

270-358 **Taanila, P.** Investigation of construction sites for hydro-electric plants by
seismic refraction method in Finland: [Finland] Geol. Tutkimuslaitos Geotek. J
kaisuja, no. 68, p. 18-27, illus., table, 1965.

Tabagua, G. G. See *Tsitsishvili, D. A. 266-235*

Tabagua, G. G. See *Tsitsishvili, D. A. 272-179*

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270-154 **Tabarovskiy, L. A.** Kvazistatsionarnoye elektromagnitnoye pole v sredak
negorizontal'nymi poverkhnostyami razdela [Quasi-stationary electromagnetic fi

in mediums with non-horizontal discontinuities (with English summ., p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 68-79, illus., 1968.

275-165 **Tabarovskiy, L. A.** Pole v sredakh so slabogorizontal'nymi poverkhnostyami razdela kak sovokupnost' E- i H-polyarizatsiy [The field in mediums with slightly horizontal discontinuities as the aggregate of E- and H-polarizations (with English summ., p. 152)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 102-109, illus., 1969.

Tabidze, D. D. See *Tskhakaya, A. D. 264-146*

264-003 **Tabor, R. W.; Engels, J. C.; Staatz, M. H.** Quartz diorite-quartz monzonite and granite plutons of the Pasayten River area, Washington—Petrology, age, and emplacement: U.S. Geol. Survey Prof. Paper 600-C, p. C45-C52, illus.,tables, 1968.

Tabutsadze, Ts. A. See *Tskhakaya, A. D. 265-166*

Tachinaka, Hiroko. See *Yukutake, Takesi. 271-340*

Tachinaka, Hiroko. See *Yukutake, Takesi. 271-341*

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265-106 **Taggart, James; Engdahl, E. R.** Estimation of PcP travel times and the depth to the core: Seismol. Soc. America Bull., v. 58, no. 4, p. 1293-1303, illus., tables, 1968.

Taggart, James. See *Herrin, Eugene. 265-108*

Taggart, James. See *Engdahl, Eric R. 267-095*

Taggart, James. See *Herrin, Eugene. 269-183*

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Tajima, Hirokazu. See *Kubotera, Akira. 275-235*

271-131 **Takada, Yuji.** A geophysical study of landslides—Application of the electrical resistivity survey to landslides: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 2, p. 37-58, illus., tables, 1968.

271-543 **Takada, Yuji.** A geophysical study of landslides—Mechanism of landslides: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 2, p. 59-77, illus., 1968.

Takagi, Akio. See *Kato, Yoshio. 268-426*

Takagi, Akio. See *Ishii, Hiroshi. 272-193*

Takagi, Akio. See *Ishii, Hiroshi. 272-194*

266-310 **Takagi, Sigetugu.** The polar motion derived from both time and latitude observations [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 77-79, illus., table, 1968.

Takahashi, Haruo. See *Morimoto, Ryohei. 270-455*

Takahashi, Taro. See *Mao, Ho-Kwang. 270-239*

271-303 **Takaki, Sin-ichiro; Tanaka, Sin-ichi.** Electrical logging and temperature surveys at Matsukawa geothermal wells [in Japanese with English abs.]: Japan Geol. Survey Bull., v. 19, no. 8, p. 507-518, illus., tables, 1968.

Takei, Shigeo. See *Giesecke, Alberto A. 269-406*

272-372 **Takeno, Setsuo.** Magnetometric and rontgenometric studies of pyrrhotite from the Kawayama mine, Japan: Hiroshima Univ. Jour. Sci., Ser. C, v. 5, no. 2, p. 113-156, illus., tables, 1966.

269-625 **Takeuchi, Hitoshi; Ishii, Yoshinori.** Data processing in reflection wave detections [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 2, p. 58-66, illus., 1968.

Takeuchi, Hitoshi. See *Watanabe, Takeshi. 269-626*

272-063 **Takeuchi, Hitoshi; Nishikawa, Masana.** Porosity of meteorites and size of their parent body [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 67-71, illus., 1968.

Takeuchi, Hitoshi. See *Oguchi, Yuko. 272-157*

Takeuchi, Hitoshi. See *Oguchi, Yuko. 272-158*

269-310 **Talbot, C. J.** Thermal convection in the Archaean crust,: Nature, v. 220, no. 5167, p. 552-556, illus., 1968.

Talbot, J. L. See *Hobbs, B. H. 266-539*

Talley, Wilson K. See *Teller, Edward. 275-133*

274-323 **Tallineau, Yves; Vigneron, Jacques; Kleimenova, Natalia.** Essai de distinction entre les emissions a tres basses frequences (TBF) du jour et du soir au moyen de l'activite magnetique—Application aux periodes d'orage magnetospherique [Attempt to distinguish between the very low frequency (ULF) emissions of the day and of the evening by means of the magnetic activity—Application to periods of magnetospheric storm]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 13, p. 949-952, illus., 1969.

267-603 **Talobre, J. A.** La mecanique des roches et ses applications (2d edition) [Rock mechanics and their applications (2d edition)]: Paris, Dunod, 442 p., illus., tables, 1967.

271-520 **Taloş, D.; Visarion, M.; Cornea, I.** Morphologie et structure du soubassement de la dépression de Transylvanie d'après les données géophysiques actuelles [Morphology and structure of the basement of the Transylvanian depression according to present geophysical data]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géophysique, v. 12, no. 2, p. 135-145, illus., 1968.

275-373 **Tal'virskiy, B. B.; Ivantsov, Yu. F.** Chardzhouskoye podnyatiye—novyy vysokoperspektivnyy rayon Bukharo-Khivinskoy neftegazonosnoy oblasti [The Chardzhou uplift—A new highly promising region of the Bukhara-Khivinsk oil and gas region]: Geologiya Nefti i Gaza, no. 4, p. 12-15, illus., 1969.

Tal'virskiy, D. B. See *Borodin, B. P. 265-646*

269-649 **Tal'virskiy, D. B.; Mlotek, V. I.; Sibgatullin, V. G.** Nekotoryye osobennosti interpretatsiya seysmorazvedki MOV v zone sploshnogo razvitiya mnogoletnemerzlykh porod (Yenisey-Khatangskiy progib) [Some features of interpretation of seismic reflection surveys in the zone of unbroken development of permafrost (Yenisei-Khatanga depression)]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 15-20, illus., 1968.

273-358 **Tamao, Tsutomu.** Magnetospheric plasma motion associated with time fluctuations of magnetic field in the solar wind: Rept. Ionosphere and Space Research Japan, v. 22, no. 4, p. 257-271, illus., table, 1968.

Tamayo, L. See *Casaverde, M. 273-166*

Tamers, M. A. See *Scharpenseel, H. W. 271-003*

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Tamhane, A. S. See *Lal, D. 269-093*

271-198 **Tamrazian, G. P.** Rôle des facteurs cosmiques dans la manifestation de la périodicité du volcanisme de boue [Role of cosmic factors in the manifestation of the periodicity of mud volcanism]: Rev. Roumaine Géologie, Géophysique, et Géographie, Ser. Géophysique, v. 12, no. 2, p. 77-85, illus., table, 1968.

265-128 **Tamrazyan, G. P.** On the problems of intra-diurnal distribution of the world's strongest earthquakes: Gerlands Beitr. Geophysik, v. 77, no. 2, p. 105-116, illus., 1968.

265-129 **Tamrazyan, G. P.** The tide-generating forces and the distribution of the intermediate and deep-foci earthquakes: Gerlands Beitr. Geophysik, v. 77, no. 3, p. 215-220, illus., table, 1968.

269-316 **Tamrazyan, G. P.** The global historical and geological regularities of the Earth's development as a reflection of its cosmic origin (as a consequence of interaction in the course of galactic movement of the solar system): Ostrava [Czechoslovakia] Vysoke Skoly Banske, Sbornik Ved. Praci, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 5-24, illus., table, 1968.

271-072 **Tamrazyan, G. P.** The lunar declination and the world's strongest earthquakes: Indian Geophys. Union Jour., v. 4, nos. 3-4, p. 131-141, illus., tables, 1967.

271-073 **Tamrazyan, G. P.** On some problems of the intra-yearly distribution of the world's strongest earthquakes: Indian Geophys. Union Jour., v. 4, nos. 3-4, p. 143-146, illus., 1967.

273-126 **Tamrazyan, G. P.** Seismicity of Norway in relation to cosmic conditions: Norsk Geol. Tidsskr., v. 49, no. 1, p. 81-86, illus., tables, 1969.

266-088 **Tamrazyan, Gurgen P.** The earthquakes of Nevada (U.S.A.) and the tidal forces: Jour. Geophys. Research, v. 73, no. 18, p. 6013-6018, illus., 1968.

269-193 **Tamrazyan, Gurgen P.** Principal regularities in the distribution of major earthquakes relative to solar and lunar tides and other cosmic forces: Icarus, v. 9, no. 3, p. 574-592, illus., 1968.

273-238 **Tamrazyan, Gurgen P.** Seismic anomalies and the dynamic evolution of the Earth's crust and upper mantle: Icarus, v. 10, no. 1, p. 164-168, illus., 1969.

Tamuly Phukan, A. L. See *Morgenstern, N. R. 272-509*

Tamura, Toshikazu. See *Nishimura, Kasuke. 275-112*

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Tanaka, Teiji. See *Kanai, Kiyoshi. 266-141*

271-082 **Tanaka, Teiji; Osada, Kaio; Osawa, Yutaka.** On the damage to buildings during the Hyuganada earthquake of April 1, 1968 [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 1169-1182, illus., tables, 1968.

271-080 **Tanaka, Teiki; Kanai, Kiyoshi; Osada, Kaio; Leeds, David J.** Observation of microtremors—[Pt.] 12, Case of the U.S.A. [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 1127-1147, illus., tables, 1968.

265-153 **Tanaka, Torao.** Study on the relation between local earthquakes and minute ground deformation—Pt. 4, On spectral structures of the tiltgrams observed at Akibasan, Wakayama City: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 17, pt. 3, p. 7-20, illus., table, 1968.

271-197 **Tanaka, Torao.** On the effect of atmospheric pressure upon ground tilt: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 2, p. 23-36, illus., tables, 1968.

267-059 **Tandon, S. N.; Wasson, John T.** Gallium, germanium, indium and iridium variations in a suite of L-group chondrites: Geochim. et Cosmochim. Acta, v. 32, no. 10, p. 1087-1109, illus., tables, 1968.

271-088 **Taneda, Sadakatu.** Geological studies on the damage of the Ebino earthquake in 1968 [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 2, p. 61-73, illus., tables, 1968.

270-069 **Taner, Dogan.** Magnitude equation for the seismological observatory, John Carroll University, for normal focus near earthquakes: Earthquake Notes, v. 39, nos. 3-4, p. 29-34, illus., tables, 1968.

Tanguy, J. C. See *Aitken, M. J. 266-020*

271-55 **Tanguy, J. C.** Relations entre les structures petrographiques de quelques laves de l'Etna et les conditions vulcanologiques de leur mise en place [Relations between the petrographic structures of several lavas of Etna and the volcanological conditions of their emplacement]: Bull. Volcanol., v. 32, no. 1, p. 177-187, illus., table, 1968.

268-615 **Tanguy, Jean-Claude; Biquand, Daniel.** Quelques proprietes physiques du magma actuel de l'Etna [Some physical properties of present magma of Etna]: Acad. Sci. Comptes Rendus, ser. D, v. 264, p. 699-702, illus., 1967.

272-364 **Tanguy, Jean-Claude.** Sur l'aimantation des laves de l'Etna et l'orientation du champ magnetique terrestre en Sicile, de 1300 a 1800 [On the magnetization of the lavas of Etna and the orientation of the geomagnetic field in Sicily from 1300 to 1800]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 2, p. 197-200, illus., table, 1969.

267-598 **Tanner, W. F.; Williams, G. K.** Model diapirs, plasticity, and tension, *in* Diapirism and diapirs—A symposium: Am. Assoc. Petroleum Geologists Mem. 8, p. 10-15, illus., 1968.

269-177 **Tanner, W. F.** Inferences concerning the geological histories of the inner planets: Ostrava Vysoke Skoly Banske, Sbornik Ved. Praci, Rada Horn.-Geol., v. 13 (1967), art. 182, spec. no., p. 59-67, 1968.

270-193 **Tanner, William F.** Tensional basins on the eastern edge of Asia [with Japanese abs.]: Geol. Soc. Japan Jour., v. 74, no. 11, p. 583-588, illus., 1968.

268-309 **Tarakanov, R. Z.; Leviy, N. V.** A model for the upper mantle with several channels of low velocity and strength, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687) p. 43-50, illus., 1968.

Tarakanov, R. Z. See *Tuyezov, I. K. 268-320*

Tarakanov, R. Z. See *Tuyezov, I. K. 268-354*

Taranichev, B. V. See *Kadukhin, G. F. 265-422*

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275-174 **Tarasenko, T. V.; Krylov, V. V.; Grigorenko, Yu. N.; Nikol'skiy, V. M.; Andriyeva, T. A.; Dekin, G. P.** Perspektivy neftegazonosnosti Kamchatskoy oblasti i plan regional'nykh geologo-geofizicheskikh rabot na neft' i gaz na 1971-1980 gg. [Oil and gas prospects of the Kamchatka district and the plan for regional geological and geophysical operations on oil and gas in 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 22-27, illus., 1969.

Tarasevich, S. I. See *Kuznetsov, M. F. 274-024*

Tarasov, E. O. See *Vikhirev, B. V. 264-196*

265-252 **Tarasov, N. A.** "Ertsprospektor"—Novyy geofizicheskiy pribor [The "Erzprospektor"—A new geophysical instrument]: Geofiz. Apparatura, no. 27, p. 11-18, illus., 1966.

Tarasov, V. N. See *Bodunov, V. P. 264-584*

Tarasov, V. N. See *Bodunov, V. P. 271-570*

264-512 **Tarasov, Yu. A.** Voprosy teorii i premeneniya v seysmorazvedke metodiki fokusirovaniya padayushchey volny (FPV) [Problems of the theory and use of the focused incident wave procedure (FIW) in seismic surveying]: Prikladnaya Geofizika, no. 51, p. 17-38, illus., 1968.

266-519 **Tarasov, Yu. A.; Rayevskiy, Yu. G.** Mnogokanal'noye vzryvnoye ustroystov dlya upravlyayemogo napravlennogo vozbuzhdeniya seysmicheskikh voln [Multichannel detonating device for controlled directional generation of seismic waves]: Razved. Geofizika, no. 25, p. 28-32, illus., 1968.

268-553 **Tarasov, Yu. A.** Voprosy teorii i primeneniya v seysmorazvedke metodiki fokusirovaniya padayushchey volny (FPV) [Problems of the theory and application in seismic surveying of the procedure of incident wave focusing (FPV)]: Prikladnaya Geofizika, no. 52, p. 33-48, illus., table, 1968.

264-261 **Tarasova, E. O.** Opredeleniye granits razdela plotnosti pri pomoshchi dispersii plotnosti gornykh porod [Determination of a density discontinuity using the density dispersion of rocks]: Razved. Geofizika, no. 23, p. 65-70, illus., 1967.

265-618 **Tárczy-Hornoch, A.** Uber die unmittelbare Berechnung der durchschnittlichen Geschwindigkeit in der Reflexionsseismik [On the direct computation of average velocity in reflection seismology (with English summ.)]: Geoexploration, v. 6, no. 1, p. 19-31, illus., 1968.

265-629 **Tárczy-Hornoch, Antal.** Über einige Fragen der Berechnung der durchschnittlichen Geschwindigkeit in der Reflexionsseismik [On some problems of the calculation of average velocities in seismic reflection work (with English summ.)]: Gerlands Beitr. Geophysik, v. 77, no. 3, p. 221-231, illus., table, 1968.

274-130 **Tárczy-Hornoch, Antal.** Zur Berechnung der geographischen Koordinaten von Erdbebenepizentren [On the calculation of the geographic coordinates of earthquake epicenters (with English and Russian summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 3-4, p. 389-407, illus., 1967.

274-182 **Tárczy-Hornoch, Antal; Ádám, Antal; Verő, József.** Untersuchungen uber dem elektrischen Aufbau des Erdmantels in Ungarn mit Hilfe des elektromagnetische Feldes der Erde [Investigations on the electrical structure of the Earth's mantle in Hungary with the help of the electromagnetic field of the Earth (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 141-147, illus., 1969.

265-230 **Tarkhov, A. G.** High frequency electrical prospecting: [India] Natl. Geophys. Research Inst. Bull., v. 6, no. 1, p. 17-24, 1968.

Tarkhov, A. G. See *Lakhtionov, M. O. 267-307*

Tarkhov, A. G. See *Kovalenko, N. D. 270-128*

272-272 **Tarkhov, A. P.; Zakutskiy, S. N.; Maksimov, V. M.** O sootnoshenii mezhdu stroyeniyem zemnoy kory i verkhney mantii po magnitovariatsionnym nablyudeniyam i drugim geofizicheskim issledovaniyam [On the relationships between structure of the crust and upper mantle according to magnetic variation observations and other geophysical investigations]: Akad. Nauk SSSR Doklady, v. 184, no. 3, p. 593-596, table, 1969.

264-361 **Tarkhov, Ye. N.** Errors in archeomagnetic investigations of inclination: Geomagnetism and Aeronomy, v. 7, no. 6, p. 860-863, illus., table, 1967.

271-308 **Tarr, Arthur C.** Rayleigh-wave dispersion in the North Atlantic Ocean, Caribbean Sea, and Gulf of Mexico: Jour. Geophys. Research, v. 74, no. 6, p. 1591-1607, illus., tables, 1969.

Tásler, R. See *Krs, Miroslav. 272-369*

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Tasybayev, B. S. See *Avrov, P. Ya. 269-661*

Tatishvili, G. V. See *Tsitsishvili, D. A. 272-179*

274-334 **Tatrallyay, M.** Koharenz-Untersuchungen von pt-Pulsationen [Coherence investigations of pt pulsations (with English and Russian summ.)]: Acad. Sci. Hungaricae Acta Geod., Geophys. et Montan., v. 2, nos. 3-4, p. 415-420, illus., tables, 1967.

Tatsugami, Masao. See *Adachi, Yukio. 265-638*

Tatsumoto, M. See *Lovering, J. F. 264-311*

270-246 **Tatsumoto, M.; Snavely, P. D., Jr.** Isotopic composition of lead in rocks of the Coast Range, Oregon and Washington: Jour. Geophys. Research, v. 74, no. 4, p. 1087-1100, illus., tables, 1969.

Tauber, A. F. See *Fritsch, Volker. 273-177*

Tauber, Alfons F. See *Fritsch, Volker. 274-181*

265-014 **Tauber, Henrik.** Copenhagen radiocarbon dates IX: Radiocarbon, v. 10, no. 2, p. 295-327, 1968.

270-500 **Täubert, Hartmut.** Einige Untersuchungen zum Einfluss der Porenflüssigkeit auf die Schallgeschwindigkeit in porösen Karbonatgesteinen [Some investigations on the effect of pore fluid on the acoustic velocity in porous carbonate rocks (with English and Russian summ.)]: Zeitschr. Angew. Geologie, v. 14, no. 9, p. 452-456, illus., table, 1968.

275-024 **Tauson, L. V.; Kozlov, V. D.; Smirnov, V. N.; Brandt, S. B.** Absolyutnyy vozrast pri reshenii geneticheskikh voprosov (Na primere granitoidov Undino-Gazimurskogo rayona, Vostochnogo Zabaykal'ye) [Absolute age in the solution of genetic problems (illustrated by the granitoids of the Undine-Gazimur region, Eastern Transbaikalia)]: Akad. Nauk SSSR Izv. Ser. Geol., no. 6, p. 3-8, illus., tables, 1969.

275-359 **Tavora, Carlos J.; Rangel Netto, Jose L. M.** Bandwidth requirements for a binary gain amplifier system: Geophysics, v. 34, no. 3, p. 396-401, illus., tables, 1969.

267-282 **Tavrin, I. F.** O stroyenii osnovnykh i ul'traosnovnykh intrusiy i glubinnykh razlomov Yuzhnogo Urala po geofizicheskim dannym [On the structure of the basic and ultrabasic intrusions and deep fractures of the Southern Urals according to geophysical data], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 147-152, illus., 1968.

Tavrin, I. F. See *Aleynikov, A. L. 268-247*

267-359 **Taylor, C. B.; Polach, H. A.; Rafter, T. A.** A review of the work of the tritium laboratory, Institute of Nuclear Sciences, New Zealand, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 185-233, tables [1967].

Taylor, D. Kh. See *Kazarin, V. A. 274-352*

272-053 **Taylor, F. C.; Dence, M. R.** A probable meteorite origin for Mistastin Lake, Labrador: Canadian Jour. Earth Sci., v. 6, no. 1, p. 39-45, illus., 1969.

269-394 **Taylor, G. N.; Earnshaw, R. D. S.** Changes in the total electron content and slab thickness of the ionosphere during a magnetic storm in June 1965: Jour. Atmos. and Terrest. Physics, v. 31, no. 1, p. 211-216, illus., 1969.

Taylor, G. R. See *Lambiotte, J. J. 272-079*

265-098 **Taylor, Gordon E.** New determination of the diameter of Neptune: Nature, v. 219, no. 5153, p. 474-475, illus., 1968.

Taylor, H. P., Jr. See *Shieh, Y. N. 272-283*

267-381 **Taylor, Harold E.; Behannon, K. W.; Ness, N. F.** Measurements of the perturbed interplanetary magnetic field in the lunar wake: Jour. Geophys. Research, v. 73, no. 21, p. 6723-6735, illus., 1968.

267-345 **Taylor, Hugh P., Jr.; Coleman, Robert G.** O-18/O-16 ratios of coexisting minerals in glaucophane-bearing metamorphic rocks: Geol. Soc. America Bull., v. 79, no. 12, p. 1727-1755, illus., 1968.

268-357 **Taylor, Hugh P., Jr.** The oxygen isotope geochemistry of igneous rocks: Contr. Mineralogy and Petrology, v. 19, no. 1, p. 1-71, illus., tables, 1968.

273-505 **Taylor, J.** Radioactivity of the Apley Barn borehole, App. V *in* The stratigraphy of the Geological Survey Apley Barn borehole, Whitney, Oxfordshire: Great Britain Geol. Survey Bull., no. 29, p. 103, 1969.

264-206 **Taylor, L. G.** Bathymetric maps for Continental Shelf development, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 255-259, illus., 1967.

264-418 **Taylor, P. T.** Interpretation of the North Arabian Sea aeromagnetic survey: Earth and Planetary Sci. Letters, v. 4, no. 3, p. , p. 232-236, illus., 1968.

270-417 **Taylor, P. W.** Design for spread footings for earthquake loadings, *in* Australia-New Zealand Conf. on Soil Mechanics and Found. Eng., 5th, Auckland, New Zealand, 1967, Proc.: Petone, New Zealand, Sigma Press, Ltd., p. 221-229, illus., table, 1967.

266-486 **Taylor, Patrick; Zietz, Isidore; Dennis, Leonard S.** Geologic implications of aeromagnetic data for the eastern continental margin of the United States: Geophysics, v. 33, no. 5, p. 755-756, 765-780, illus., 1968.

265-007 **Taylor, R. E.; Berger, Rainer; Dimsdale, B.** Electronic data processing for radiocarbon dates: Am. Antiquity, v. 33, no. 2, p. 180-184, illus., table, 1968.

Taylor, R. G. F. See *Pointon, A. J. 265-184*

264-559 **Tazieff, Haroun.** Volcanoes: London, Prentice-Hall International, 104 p., illus., 1962.

269-691 **Tazieff, Haroun; Boulay, Jean-Louis; Garand, Marcel; Manlard, Jean.** Mesure des variations rapides des paramètres thermique dez gaz eruptifs [Measurements of the rapid variations of the thermal parameters of eruptive gases]: Acad. Sci. Comptes Rendus, ser. B, v. 267, no. 22, p. 1253-1256, illus., 1968.

Tazieff, Haroun. See *Elskens, I. 271-554*

272-522 **Tazieff, Haroun.** Le volcanisme et les indices de mobilite du manteau terrestre [Volcanism and the indications of mobility of the Earth's mantle]: Stromboli, no. 11, p. 3-12, illus., no date.

265-466 **Tazima, Minoru.** Accuracy of recent magnetic survey and a locally anomalous behaviour of the geomagnetic secular variation in Japan: Japan Geog. Survey Inst. Bull., v. 13, pt. 2, p. 1-78, illus., tables, 1968.

269-628 **Tazime, Kyozi.** Refraction shooting at the projected place for the large bridge on the Bay of Akkeshi in Hokkaido—Comparison with the result of test borings: Butsuri-Tanko, v. 21, no. 4, p. 193-198, illus., tables, 1968.

272-156 **Tazime, Kyozi; Okada, Hiroshi.** A way to conformal mapping of the characteristic equation for Love-type waves, [Pt.] 3 [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 1-13, illus., 1968.

Tchalenko, J. S. See *Ambraseys, N. N. 267-113*

273-483 **Tchalenko, J. S.** The evolution of kink-bands and the development of compression textures in sheared clays: Tectonophysics, v. 6, no. 2, p. 159-174, illus., 1968.

Teichmuller, M. See *Colombo, U. 266-410*

Teichmuller, R. See *Colombo, U. 266-410*

265-620 **Teikari, P.** A method for selecting a seismometer-galvanometer combination having the required response curve: Geophysica, v. 9, no. 4, p. 307-312, illus., 1967.

265-134 **Teisseyre, R.; Vesanen, E.** On the exceptional earthquake swarm activity at Matsushiro, Japan: Geophysica, v. 9, no. 4, p. 287-291, illus., 1967.

Teisseyre, Roman. See *Guterch, Aleksander. 271-319*

275-109 **Teisseyre, Roman.** Dislocation field dynamics as an approach to the physics of earthquake processes [with French abs.], *in* A symposium on processes in the focal region—Internat. Union Geodesy and Geophysics, 14th Gen. Assembly, Zurich, 1967: Dominion Observatory Ottawa Pubs., v. 37, no. 7, p. 199-210, 1969.

264-508 **Telegin, A. N.; Mikheyeva, S. V.; Vasserman, T. M.** Vydeleniye razryvnykh narusheniy po geologo-geofizicheskim materialam (na primere o. Sakhalina) [Bringing out fault breaks on the basis of geologic and geophysical data (illustrated by Sakhalin Island)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 97-102, illus., 1968.

Telegin, A. N. See *Ostistyy, B. K. 275-177*

Telepin, M. A. See *Berezhnaya, L. T. 264-266*

Telezhenko, V. P. See *Doroginitskaya, L. M. 264-525*

275-133 **Teller, Edward; Talley, Wilson K.; Higgins, Gary H.; Johnson, Gerald W.** The constructive uses of nuclear explosives: New York, McGraw-Hill Book Co., 320 p., illus., tables, 1968.

269-252 **Ten, K. M.** O stroyenii poverkhnosti kristallicheskogo fundamenta severnoy chasti Tatarskogo svoda po dannym elektrorazvedki [On the structure of the surface of the crystalline basement of the northern part of the Tatar arch according to electrical survey data], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 167-169, illus., 1966.

Tendou, Hisao. See *Ishii, Fumio. 272-508*

Tenenbaum, I. M. See *Balyasnyy, N. D. 270-345*

271-112 **Teng, La-Liang; Richards, Paul G.** Diffracted P, SV, and SH waves and their shadow boundary shifts: Jour. Geophys. Research, v. 74, no. 6, p. 1537-1555, illus., 1969.

Teodorescu, C. See *Ciocardel, R. 265-302*

Teplinskiy, G. I. See *Gavrilov, Ye. Ya. 267-365*

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Terasmae, J. See *Hobson, George D. 273-457*

Terekhin, Ye. N. See *Van'yan, L. L. 275-151*

267-642 **Tereshchenko, Yu. P.** O zamene kulachkov v kavernomerakh i mikrokavernomerakh [On replacement of the cogs in caliper and microcaliper loggers]: Geofiz. Apparatura, no. 34, p. 171-175, illus., 1967.

274-282 **Ter-Karapetyants, Zh. N.; Shabanov, S. F.** O temperaturnom rezhime mestorozhdeniya Buzovny-Mashtagi [On the temperature regime of the Buzovny-Mashtagi field]: Akad. Nauk Azerbaydzhan. SSR Doklady, v. 25, no. 1, p. 17-20, illus., tables, 1969.

270-422 **Termetchikov, M. K.; Zhakypbekov, A.** K voprosu opredeleniya vremennogo soprotivleniya gornykh porod pri odnoosnom szhatii [On the problem of the determination of the temporal resistance of rocks in the case of uniaxial compression], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 65-75, illus., table, 1967.

270-423 **Termetchikov, M. K.; Podoynitsyn, Ye. M.** Fiziko-mekhanicheskiye svoystva ekvivalentnykh peschano-tsementnykh materialov [The physico-mechanical properties of equivalent sand-cement materials], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 76-78, illus., table, 1967.

Terpelyak, A. A. See *Timoshin, Yu. V. 266-521*

270-212 **Ters, Mireille.** La tectonique posthume en Bretagne meridionale et en Vendee, dans ses relations avec les donnees gravimetriques [The postorogenic tectonics in southern Brittany and in Vendee, in their relations with gravimetric data], *in* Contribution de la carte gravimetrique a la geologie du Massif Armoricain: [France] Bur. Recherches Geol. et Minieres Mem., no. 52, p. 73-82, illus., 1967.

Testa, Richard. See *Mellor, Malcolm. 273-282*

Testa, Richard. See *Mellor, Malcolm. 273-283*

273-213 **Teterev, G. M.** Otsenka neftegazonosnosti Turgayskogo progiba i yego otdel'nykh ploshchadey, v svyazi s vyborom mest zalozheniy glubokikh poiskovo-strukturnykh skvazhin [Estimation of the oil- and gas-bearing capability of the Turgay depression and its individual areas in connection with the choice of sites for deep structural-exploration drillholes], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 55-71, illus., 1964.

Tetyukhin, G. F. See *Mavlyanov, T. A. 264-232*

Tetyukhin, G. F. See *Mavlyanov, G. A. 266-329*

274-119 **Teupser, Christian.** High sensitive electromagnetic seismographs with extinct galvanometer reaction and sensitivity control: Pure and Appl. Geophysics, v. 73, p. 120-128, 1969.

265-596 **Tewari, S. G.; Ghosh, P. C.; Bhatnagar, A. S.** A closed circuit technique for the measurement of radon/thoron ratio in soil-gas: Indian Jour. Pure and Appl. Physics, v. 6, no. 1, p. 33-36, illus., tables, 1968.

Těžký, A. See *Marusiak, I. 264-575*

272-549 **Těžký, Antonín.** Prakticheskaya primenimost'teorii geometricheskikh faktorov i otsenka vliyaniya effekta sobstvennoy induktsii v induktsionnom karotazhe [Practical applicability of the theory of geometric factors and estimation of the effect of natural induction in induction logging [with Czech and German abs.]: Československá Akad. Věd Geofys. Sborník 1967, v. 15, p. 483-493, illus., tables, 1968.

264-530 **Thakur, Devendra Nath.** Some aspects of rock pressure modelling on equivalent materials: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 4, p. 355-369, illus., tables, 1968.

275-263 **Thayer, T. P.** Peridotite-gabbro complexes as keys to petrology of mid-oceanic ridges: Geol. Soc. America Bull., v. 80, no. 8, p. 1515-1522, illus., tables, 1969.

Theilig, F. See *Muller, E. P. 266-409*

265-594 **Theisen, Arthur A.; Borchardt, Glenn A.; Harward, Moyle E.; Schmitt, Roman A.** Neutron activation for distinguishing Cascade Range pyroclastics: Science, v. 161, no. 3845, p. 1009-1011, tables, 1968.

267-584 **Thieme, Hansgeorg.** Sovremennaya seysmicheskaya apparatura (soobshcheniye otdela informatsii i dokumentatsii Narodnogo geofizicheskogo predpriyatiya, g. Leyptsig) [Modern seismic apparatus (Report of the branch of information and documentation of the VEB Geophysik in Leipzig)]: Geofiz. Apparatura, no. 34, p. 5-7, 1967.

271-116 **Thill, Richard E.; Bur, Thomas R.** An automated ultrasonic pulse measurement system: Geophysics, v. 34, no. 1, p. 101-105, illus., 1969.

275-293 **Thode, H.; Monster, D.** Rasprostranennost' izotopov sery v evaporitakh i drevnykh okeanakh [Distribution of the sulfur isotopes in evaporites and the ancient oceans], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 589-600, illus., tables, 1964.

266-414 **Thode, H. G.; Monster, J.** The sulfur isotope abundances in evaporites and in the ancient oceans, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 630-641, illus., tables, 1967; originally published *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

Thomas, Harold E. See *Smith, James Ward. 272-540*

270-279 **Thomas, J.** Offshore exploration with high sensitivity magnetometer: APEA Jour., v. 8, pt. 2, p. 88-100, illus., 1968.

Thomas, J. A. See *Cole, K. D. 268-384*

267-399 **Thomas, L.** World-wide disturbances in the F-region accompanying the onset of the main phase of severe magnetic storms: Jour. Atmos. and Terrest. Physics, v. 30, no. 9, p. 1623-1630, illus., 1968.

272-095 **Thomas, L.** Rayleigh wave dispersion in Australia: Seismol. Soc. America Bull., v. 59, no. 1, p. 167-182, illus., tables, 1969.

264-202 **Thomas, P. D.** Background on geodetic principles and theories, *in* Marine geodesy symposium, 1st, Columbus, Ohio, 1966, Proc.: Washington, D.C., U.S. Government Printing Office, p. 9-25, illus., table, 1967.

271-010 **Thommeret, J.; Thommeret, Y.** Monaco radiocarbon measurements III: Radiocarbon, v. 11, no. 1, p. 118-129, 1969.

Thommeret, Y. See *Gennesseaux, M. 272-027*

Thommeret, Y. See *Thommeret, J. 271-010*

267-299 **Thompson, G. E. K.** Some physical measurements in the Waiotapu area, *in* Waiotapu geothermal field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 59-74, illus., 1963.

Thompson, Geoffrey. See *Melson, W. G. 268-603*

Thompson, George A. See *Meister, Laurent J. 266-087*

Thompson, Maxwell N. See *Pannella, Giorgio. 267-136*

270-238 **Thomsen, Leon; Anderson, Orson L.** On the high-temperature equation of state of solids: Jour. Geophys. Research, v. 74, no. 4, p. 981-991, illus., tables, 1969.

Thon, H.-G. See *Rotter, D. 270-372*

264-554 **Thorarinsson, Sigurdur.** Skaftáreldar og Lakagígar—Myndir úr jardhfraedhi Íslands VIII [The Lakagigar eruption of 1783 and the Lakagigar crater row (with English summ.)]: Náttúrufraedhingurinn, v. 37, nos. 1-2, p. 27-57, illus., tables, 1968.

268-616 **Thorarinsson, Sigurdur.** On the rate of lava- and tephra production and the upward migration of magma in four Icelandic eruptions: Geol. Rundschau, v. 57, no. 3, p. 705-718, illus., tables, 1968.

266-554 **Thorlaksson, J. E.** A probability model of volcanoes and the probability of eruptions of Hekla and Katla: Bull. Volcanol., v. 31, p. 97-106, illus., tables, 1968.

Thorp, William H. See *Browning, David G. 266-175*

Thorp, William H. See *Browning, David G. 267-574*

Thorpe, A. N. See *Gilchrist, J. 271-033*

Throop, W. H. See *Snow, R. B. 272-527*

264-239 **Thyssen, F.** Determination of temperature on ice caps by seismic methods [with French and German abs.]: Jour. Glaciology, v. 7, no. 50, p. 333-335, 1968.

266-332 **Thyssen, F.; Kohnen, H.** Eisseismische Untersuchungen auf dem Schmiedinger Kees [Ice-seismic investigations on the Schmiedinger Kees (with English abs.)]: Polarforschung 1966, v. 36, pts. 1-2, no. 6, p. 78-82, illus., 1968.

273-456 **Tibbetts, B. L.; Behrendt, J. C.; Love, J. D.** Seismic-refraction measurements in Jackson Hole, Wyoming: Geol. Soc. America Bull., v. 80, no. 6, p. 1109-1121, illus., table, 1969.

Tibbetts, Benton L. See *Behrendt, John C. 273-204*

Tiedemann, Herbert A. See *Stearns, Richard G. 273-074*

Tikhomirov, N. D. See *Smirnov, G. S. 269-592*

268-286 **Tikhomirov, V. M.** Plotnosti gornykh porod i yeye ispol'zovaniya pri geologicheskom kartirovanii [Density of rocks and its use in geologic mapping], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 87-94, illus., 1968.

271-293 **Tikhonov, A. N.; Glasko, V. B.; Litvinenko, O. K.; Melikov, V. R.** O prodolzhenii potentsiala v storony vozmushchayushchikh mass na osnove metoda regulyarizatsii [On the continuation of the potential toward disturbing masses on the basis of the regularization method]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 30-48, illus., tables, 1968.

274-073 **Tikhonova, T. V.; Troitskiy, V. S.** Vliyaniye potoka tepla iz nedr Luny na yeye radioizlucheniye pri izmenenii svoystv veshchestva v glubinu [Effect of heat flow from the interior of the Moon on its radio emission in the case of a change in the properties of matter with depth (with English summ.)]: Astron. Zhur., v. 46, no. 1, p. 159-171, illus., 1969.

Tikmakov, V. A. See *Roustanovitch, D. N. 268-132*

Tilling, R. I. See *Doe, B. R. 275-271*

267-002 **Tilling, Robert I.; Klepper, Montis R.; Obradovich, John D.** K-Ar ages and time span of emplacement of the Boulder batholith, Montana: Am. Jour. Sci., v. 266, no. 8, p. 671-689, illus., table, 1968.

Tilton, G. R. See *Davis, G. L. 267-005*

Tilton, G. R. See *Hart, S. R. 267-013*

273-001 **Tilton, G. R.; Steiger, R. H.** Mineral ages and isotopic composition of primary lead at Manitouwadge, Ontario: Jour. Geophys. Research, v. 74, no. 8, p. 2118-2132, illus., tables, 1969.

268-170 **Timchenko, I. P.** Fiziko-mekhanicheskiye svoystva karbonatnykh porod i ikh izmeneniye pri metasomaticheskikh protsessakh na primere skarnovo-polimetallicheskikh mestorozhdeniy severnogo sklona Kuraminskogo khrebta (Kara Mazar) [Physicomechanical properties of carbonate rocks and their changes due to metasomatic processes illustrated by the skarn-polymetallic deposit of the north flank of the Kurama Mountains (Kara Mazar)], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 270-276, illus., tables, 1968.

267-240 **Timofeyev, A. N.** Ob izostazii i noveyshikh vertikal'nykh dvizheniyakh zemnoy kory na Urale [On isostasy and young vertical movements of the Earth's crust in the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 335-340, illus., 1968.

267-279 **Timofeyev, A. N.; Kuznetsov, A. A.; Bellavin, O. V.; Aleynikov, A. L.** Strukturnaya skhema zemnoy kory Urala po gravimetricheskim dannym [Structural scheme of the crust in the Urals according to gravimetric data], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 101-108, illus., 1968.

268-273 **Timofeyev, A. N.; Yershov, V. M.; Kuznetsov, A. A.; Aleynikov, A. L.** Opyt obnaruzheniya polostey pod zhelezobetonnoy oblitsovkoy kanalov po gravimetricheski dannym [Attempt to detect cavities under ferroconcrete-lined canals by means of gravimetric data], *in* Stroyeniya zemnoy kory Urala: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 51-60, illus., 1967.

267-330 **Timofeyev, N. S.** Osnovnyye aspekty prokhodki burovykh skvazhin glubinoy 7 km [Main aspects of conducting drilling wells to a depth of 7 km], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, 1966, Trudy: Moscow, Izdatel'stvo "Nauka," p. 21-27, 1968.

Timofeyev, V. M. See *Kamenetskiy, F. M. 274-197*

266-521 **Timoshin, Yu. V.; Terpelyak, A. A.** Preobrazovaniye seysmogramm v izobrazheniya sredy [Transformation of seismograms into pictures of the medium], *in* Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 3-30, illus., 1967.

266-522 **Timoshin, Yu. V.; Martynenko, A. I.** O preobrazivanii seysmicheskoy informatsii s pomoshch'yu elektronnykh vychislitel'nykh mashin [On the transformation of seismic information using electronic computers], *in* Avtomaticheskaya obrabotka i preobrazovaniye geofizicheskoy informatsii, no. 2: Ukrain. Nauchno-Issled. Geologorazved. Inst. Trudy, no. 15, p. 31-54, illus., 1967.

265-182 **Timur, A.** Velocity of compressional waves in proous media at permafrost temperatures: Geophysics, v. 33, no. 4, p. 584-595, illus., tables, 1968.

270-482 **Timur, A.** An investigation of permeability, porosity, and residual water saturation relationships for sandstone reservoirs: Log Analyst, v. 9, no. 4, p. 8-17, illus., tables, 1968.

272-534 **Timur, A.** An investigation of permeability, porosity, and residual water saturation relationships, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. J1-J18, illus., tables, 1968.

272-535 **Timur, A.** Effective porosity and permeability of sandstones investigated through nuclear magnetic resonance principles, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. K1-K18, illus., tables, 1968.

273-500 **Timur, A.** Producible porosity and permeability of sandstones investigated through nuclear magnetic resonance principles: Log Analyst, v. 10, no. 1, p. 3-11, illus., tables, 1969.

Tirkala, Ferenc. See *Szabo, Janos. 270-508*

Tischendorf, Gerhard. See *Baumann, Ludwig. 272-265*

266-154 **Tishchenko, V. G.** O seysmicheskikh volnakh v tele vysokikh plotin iz mestnykh materialov [On seismic waves in the body of high dams made of local materials], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzhenernoy Seysmologii, no. 11, p. 107-113, illus., 1967.

Tishler, Samuel W. See *Comerford, Matthias F. 270-033*

271-164 **Tison, James C.** Marine geodesy: Bull. Geod., no. 88, p. 163-167, 1968.

266-023 **Tite, M. S.** Some complicating factors in thermoluminescent dating and their implications, Chap. 7.3 *in* Thermoluminescence of geological materials—NATO Advanced Research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 389-405, illus., tables, 1968.

264-493 **Titkov, A. N.** Opyt primeneniya vozdukhnykh vzryvov v seysmicheskoy razvedke [Attempt to use aerial shots in seismic surveying]: Prikladnaya Geofozika, no. 50, p. 119-123, illus., 1967.

Tiunov, P. G. See *Frolovich, G. M. 269-657*

270-487 **Tixier, M. P.; Morris, R. L.; Connell, J. G.** Log evaluation of low-resistivity pay sands in the Gulf Coast: Log Analyst, v. 9, no. 6, p. 3-20, illus., 1968.

266-553 **Tjia, H. D.** Volcanic lineaments in the Indonesian island arcs: Bull. Volcanol., v. 31, p. 85-96, illus., tables, 1968.

273-262 **Tjia, H. D.** New evidence of recent diastrophism in East Indonesia: Bandung, Inst. Technology Dept. Geology Contr., no. 69, p. 71-76, illus., 1968.

Tkachenko, V. V. See *Savinskiy, K. A. 275-176*

Tkachev, Ye. V. See *Valuyskiy, A. A. 270-517*

Tobailem, J. See *Mabuchi, H. 265-078*

269-099 **Tobailem, J.; David, B.; Nordemann, D.** Radioactivite induite par le rayonnement cosmique dans la meteorite Saint Severin [Radioactivity induced by cosmic radiation in the Saint Severin meteorite (with English abs.)], *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 207-213, illus., tables, 1967.

266-055 **Tobailem, Jacques; Yokoyama, Yuji; Mabuchi, Hisao; Baillard, Noelle.** Mesure de l'abondance du phosphore-32 et du phosphore-33 dans la meteorite Saint-Severin [Measurement of the abundance of phosphorus-32 and phosphorous-33 in the Saint Severin meteorite]: Acad. Sci. Comptes Rendus, ser. B, v. 266, no. 26, p. 1636-1639, illus., 1968.

Tobayas, Vladimir. See *Radu, Cornelius. 272-115*

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Todd, F. C. See *Mirbagheri, M. 270-099*

265-038 **Todd, Thomas W.** Dynamic diversion—Influence of longshore current-tidal flow interaction on chenier and barrier island plains: Jour. Sed. Petrology, v. 38, no. 3, p. 734-746, illus., 1968.

274-304 **Togliatti, Vittorio.** Il rapporto O-18:O-16 in *Patella coerulea* della costa Tirrenica [The O-18:O-16 ratio in *Patella coerulea* on the Tyrrhenian coast]: Accad. Sci. Ist Bologna Atti, Cl. Sci. Fiz. Rend. 1965-66, ser. 12, v. 3, nos. 1-2, p. 70-82, illus., 1968.

274-305 **Togliatti, Vittorio.** Studio del contenuto in O-18 e in C-13 di alcune rocce carbonatiche della Liguria orientale [Study of the O-18 and C-13 content of some carbonate rocks of eastern Liguria]: Accad. Sci. Ist. Bologna Atti, Cl. Sci. Fis. Rend 1965-66, ser. 12, v. 3, nos. 1-2, p. 83-96, illus., tables, 1968.

Toivonen, V. See *Hyyppa, E. 271-015*

Tokarev, A. S. See *Makarov, K. K. 275-172*

Tokarev, A. S. See *Savinskiy, K. A. 275-176*

Tokarev, P. I. See *Fedotov, S. A. 264-139*

265-175 **Tokarev, P. I.; Fedotov, S. A.; Bagdasarova, A. M.; Bobkov, M. F.** Zemletryaseniya Kamchatki i Komandorskikh ostrovov po dannym detal'nyk seysmogeologicheskikh nablyudeniy [Earthquakes of Kamchatka and the Commander Islands according to data of detailed seismogeological observations], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, 159-179, illus., tables, 1967.

267-275 **Tokarev, V. A.** O drevnem podvizhnom poyase Kolmozero-Voron'ya i Khibi skom razlome na Kol'skom poluostrove [On the ancient Kolmozero-Voron'ya mo

bile belt and the Khibinsk fault on the Kola Peninsula], *in* Geofizika i tektonika Kol'skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 61-69, illus., table, 1968.

Tokarev, V. P. See *Mirchink, M. F. 269-278*

269-672 **Tokhtuyev, G. V.; Klimenko, V. G.; Borisenko, V. G.** O roli nekotorykh geologicheskikh faktorov v zakonomernykh izmeneniyakh fiziko-mekhanicheskikh svoystv porod Bol'shogo Krivogo Roga [On the role of some geologic factors in the systematic variations of physico-mechanical properties of rocks from the Greater Krivoy Rog], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 258-264, illus., table, 1968.

Toki, Kenzo. See *Goto, Hisao. 267-123*

Tokmagambetov, G. A. See *Makarevich, K. G. 275-220*

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Toksöz, M. Nafi. See *Boore, David M. 272-253*

275-258 **Toksoz, M. Nafi; Arkani-Hamed, Jafar; Knight, Curtis A.** Geophysical data and long-wave heterogeneities of the Earth's mantle: Jour. Geophys. Research, v. 74, no. 15, p. 3751-3770, illus., tables, 1969.

272-055 **Tolansky, S.** Interferometric examination of tektites: Nature, v. 222, no. 5190, p. 259-260, illus., 1969.

Tolkunov, A. Ye. See *Kantsel', A. V. 268-171*

Tolmachev, V. V. See *Mirchink, M. F. 269-278*

Tolpadi, S. See *Kaul, I. K. 266-018*

268-105 **Tolson, Robert H.; Gapcynski, John P.** An analysis of the lunar gravitational field as obtained from Lunar Orbiter tracking data, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 178-186, illus., 1968.

Tolstikhin, I. N. See *Mamyrin, B. A. 272-287*

268-438 **Tolstikhin, M. M.; Simonenko, T. N.** On block structure of the basement of the Eastern-European platform, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 17-22, illus., 1968.

Tolstikhina, M. M. See *Simonenko, T. N. 265-326*

268-164 **Tomashevskaya, I. S.** Skorosti prodol'nykh voln v nekotorykh gornykh porod i mineralakh Khibinskogo massiva pri trekhosnom napryazhennom sostoyanii [Longitudinal wave velocities in some rocks and minerals from the Khibiny massif in the triaxially stressed state], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 143-148, illus., table, 1968.

Tomera, G. A. See *Lyubimova, Ye. A. 272-246*

Tomeshunas, Yu. I. See *Zander, V. N. 265-306*

Tomilov, S. B. See *Levskiy, L. K. 272-066*

264-258 **Tomoda, Yoshibumi; Segawa, Jiro.** Gravity measurement at sea in the regions—Eastern part of the Indian Ocean, off Java and Sumatra, Strait of Malacca, South China Sea, Bashi Channel, East China Sea, off southern coast of Kyushu: Tokyo Univ. Ocean Research Inst. Collected Reprints 1967, v. 6, p. 54-78, 1968; reprinted from Tokyo Univ. Fisheries Jour., no. 8, p. 107-131, illus., 1966.

264-426 **Tomoda, Yoshibumi; Ozawa, Keijiro.** Measurement of total magnetic force in the east part of the Indian Ocean: Tokyo Univ. Ocean Research Inst. Collected Reprints 1967, v. 6, p. 31-53, 1968; reprinted from Tokyo Univ. Fisheries Jour., 8, p. 83-105, illus., table, 1966.

Tomoda, Yoshibumi. See *Segawa, Jiro. 264-427*

264-428 **Tomoda, Yoshibumi; Koizumi, Kinichiro.** Measurement of the vertical component of the magnetic force on board the "Tansei-maru": Tokyo Univ. Ocean Research Inst. Collected Reprints 1967, v. 6, p. 100-107, 1968; reprinted from Geod. Soc. Japan Jour., no. 12, p. 165-172, illus., 1967.

269-165 **Tomson, I. N.; Khodak, Yu. A.; Khoroshilov, L. V.** Kol'tsevyye struktury Zemli i Luny (Opyt sravitel'nogo planetologicheskogo issledovaniya) [Ring structures of the Earth and Moon (Attempt at a comparative planetological investigation)]: Sovetskaya Geologiya, no. 9, p. 73-86, illus., 1968.

Tonani, F. See *Elskens, I. 271-555*

Tongiorgi, E. See *Gonfiantini, R. 200-012*

Tongiorgi, E. See *Fornaca-Rinaldi, G. 264-310*

267-351 **Tongiorgi, E.** (editor). Nuclear geology on geothermal areas—Spoleto 1963: Pisa, Italy, Laboratorio Geologia Nucleare, 284 p., illus., tables [1967].

Tongiorgi, M. See *Cataldi, R. 267-292*

268-531 **Tonkov, V. V.** Poluprovodnikovoyy izmeritel' sredney skorosti scheta dlya radiometricheskikh priborov [Semiconductor device for measuring average counting rate for radiometric instruments], *in* Yaderno-geofizicheskiye issledovaniya: Akad Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 93-98, illus. 1967.

Tonkov, V. V. See *Utkin, V. I. 268-532*

Tonkov, V. V. See *Utkin, V. I. 268-653*

Toomre, Alar. See *Goldreich, Peter. 274-353*

266-305 **Torao, M.; Okazaki, S.; Fujii, S.** Secular variation of longitude and relate problems [with French abs.], *in* Continental drift, secular motion of the pole, an rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Ver lag, p. 45-51, illus., tables, 1968.

265-300 **Torii, Eiichiro.** The buried topography along the southern coast of Hokkaido [i Japanese with English summ.]: Geog. Rev. Japan, v. 41, no. 2, p. 63-80, illus., table 1968.

Törum, Alf. See *Wilson, Basil W. 271-052*

273-016 **Tougarinov, A. I.; Knorre, K. G.; Shanin, L. L.; Prokofiyeva, L. N.** Th geochronology of some Precambrian rocks of southern West Africa, *in* Geochronolo gy of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 196 Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 639-642, illus., tables, 1968.

273-018 **Tougarinov, A. I.** Geochronology of the Aldan Shield, southeastern Siberia, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 649-655, illus., tables, 1968.

Tougarinov, A. I. See *Semenenko, N. P. 273-020*

264-330 **Tough, J. G.; Roberts, P. H.** Nearly symmetric hydromagnetic dynamos: Physics Earth and Planetary Interiors, v. 1, no. 4, p. 288-296, illus., 1968.

Touray, J. C. See *Deicha, G. 268-335*

269-021 **Tourette, Michel.** Etude geochronologique par la methode au strontium de la serie cristallophyllienne de la Moyenne Dordogne et de quelques migmatites de type Aubusson dans le Massif Central francais [Geochronologic study by the strontium method of a phyllite series in the Moyenne Dordogne and of some migmatites of the Aubusson type in the French Massif Central], *in* Etudes geochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Geologie et Mineralogie, no. 36, pt. 16, p. 77-108, illus., tables, 1967.

Tournier, Daniel. See *Roussel, Jacques. 269-243*

Tousey, R. See *Koomen, M. J. 268-106*

265-321 **Träger, Lubomir.** Ausgleichung des tschechoslowakischen Gravimeternetzes [Adjustment of the Czechoslovakian gravity net (with Russian summ.)]: Československá Akad. Věd Studia Geophys. et Geod., v. 12, no. 3, p. 246-258, illus., tables, 1968.

274-430 **Tramontini, C.; Davies, D.** A seismic refraction survey in the Red Sea: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 225-241, illus., tables, 1969.

Trapeznikov, Yu. M. See *Kropotkin, P. N. 269-471*

266-313 **Trask, Donald W.; Vegos, Charles J.** Intercontinental longitude differences of tracking stations as determined from radio-tracking data [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 91-94, table, 1968.

274-056 **Trask, N. J.** Geologic map of the Sabine DM region of the Moon: U.S. Geol. Survey Misc. Geol. Inv. Map I-594 (RLC-9), text, 1969.

Trautman, Milton A. See *Buckley, James D. 265-013*

274-070 **Treder, Hans-Jurgen.** Geophysik und Kosmologie [Geophysics and cosmology (with English summ.)]: Gerlands Beitr. Geophysik, v. 78, no. 1, p. 1-26, 1969.

269-644 **Tregub, F. S.** Sredniye skorosti rasprostraneniya voln v Kurinskoy nizmennosti (po materialam GSZ) [Average velocities of wave propagation in the Kura Lowland (according to deep seismic sounding data)]: Razved. Geofizika, no. 27, p. 14-27, illus., table, 1968.

Treitel, Sven. See *Wuenschel, P. C. 274-217*

Treitel, Sven. See *Peacock. K. L. 274-419*

269-224 **Trembly, Lynn D.; Berg, Joseph W., Jr.** Seismic source characteristics from explosion-generated P waves: Seismol. Soc. America Bull., v. 58, no. 6, p. 1833-1848, illus., tables, 1968.

Treskova, Yu. A. See *Bikkenina, S. K. 268-313*

266-479 **Tretyak, A. N.; Rusakov, O. M.** Izmeneniye namagnichesnnykh osadochnykh porod pri nagrebakh [Change in magnetization of sedimentary rocks upon heating (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 12-22, illus., table, 1968.

266-482 **Tretyak, A. N.** O proiskhozhdenii yestestvennoy ostatochnoy namagnichennosti pozdnetretichnykh i chertvertichnykh otlozheniy USSR [On the origin of the natural remanent magnetization of the Upper Tertiary and Quaternary formations of the Ukrainian S.S.R. (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 24, p. 73-77, illus., 1968.

275-344 **Tretyak, A. N.** Analiz metodov temperaturnogo izucheniya namagnichennosti i opredeleniya temperatury Kyuri [Analysis of thermal study of magnetization and determination of Curie temperature (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz. Sbornik, no. 27, p. 19-28, illus., 1969.

Tret'yakov, V. G. See *Morozov, M. D. 275-182*

Treumann, Rudolf. See *Fanselau, Gerhard. 265-227*

272-090 **Tricker, R. A. R.** The paths of the planets: New York, American Elsevier Publishing Co., 240 p., illus., tables, 1967.

Trifonov, V. G. See *Markov, M. S. 269-151*

Trifonov, V. P. See *Rozhdestvenskiy, A. P. 267-239*

Trifonov, V. V. See *Balyasnyy, N. D. 270-345*

275-268 **Trivedi, B. M. P.; Goel, P. S.** Production of Na-22 and H-3 in a thick silicate target and its application to meteorites: Jour. Geophys. Research, v. 74, no. 15, p. 3909-3917, illus., tables, 1969.

Trivedi, N. B. See *Rastogi, R. G. 267-408*

272-342 **Trivedi, N. B.; Rastogi, R. G.** Studies of sudden changes in H and Z at equatorial stations in the Indian zone [with French abs.]: Annales Geophysique, v. 24, no. 4, p. 1037-1043, illus., tables, 1968.

Trofimov, I. L. See *Bobrov, V. N. 264-362*

Trofimov, I. L. See *Bobrov, V. N. 273-367*

275-170 **Trofimuk, A. A.; Pritula, Yu. A.; Savinskiy, K. A.** Geologiya i neftegazonosnost' Sibirskoy platformy i osnovnyye zadachi regional'nykh geologo-geofizicheskikh rabot na neft' i gaz na 1971-1980 gg. [Geology and oil and gas possibilities of the Siberian platform and main tasks of regional geological and geophysical operations on oil and gas for 1971-80]: Geologiya Nefti i Gaza, no. 2, p. 4-9, table, 1969.

264-368 **Troitskaya, V. A.; Mal'tseva, N. F.** Possible influence of ionospheric conditions on the formation of pulsation intervals of decreasing period in the electromagnetic field of the Earth: Geomagnetism and Aeronomy, v. 7, no. 6, p. 915-916, illus., 1967.

Troitskaya, V. A. See *Van-Chi, Fam. 264-375*

Troitskaya, V. A. See *Kovtun, A. A. 265-245*

Troitskaya, V. A. See *Bolsakova, A. V. 265-425*

267-407 **Troitskaya, V. A.; Bolshakova, O. V.; Hessler, V. P.** Preliminary results o micropulsation studies at magnetoconjugate points in the Arctic and Antarctic [with French abs.]: Annales Geophysique, v. 24, no. 3, p. 741-746, illus., 1968.

Troitskaya, V. A. See *Keymenova, N. G. 269-410*

Troitskaya, V. A. See *Matveyeva, E. T. 269-415*

271-349 **Troitskaya, V. A.; Baranskiy, L. N.; Vinogradov, P. A.; Sobolev, A. V.; Solov'yev, S. I.** Some properties of Pc1-type pulsations of the electromagnetic field of the Earth, observed simultaneously over a wide area: Geomagnetism and Aeronomy, v. 8, no. 4, p. 579-582, illus., 1968.

271-355 **Troitskaya, V. A.; Shchepetnov, R. V.; Gul'yelmi, A. V.** Estimate of electrical fields in the magnetosphere from the frequency drift of micropulsations: Geomagnetism and Aeronomy, v. 8, no. 4, p. 634, 1968.

Troitskaya, V. A. See *Matveyeva, E. T. 272-327*

272-350 **Troitskaya, V. A.; Shchepetnov, R. V.; Gul'yelmi, A. V.** Opredeleniye razmerov podsolnechnoy magnitosfery po dannym nazemnykh nablyudeniy geomagnitnykh mikropul'satsiy [Determination of the dimensions of the subsolar magnetosphere from data of ground observations of geomagnetic micropulsations]: Akad. Nauk SSSR Doklady, v. 182, no. 5, p. 1063-1066, illus., table, 1968.

Troitskaya, V. A. See *Matveyeva, E. T. 273-368*

273-369 **Troitskaya, V. A.; Matveyeva, E. T.; Ivanov, K. G.; Gul'yelmi, A. V.** Change in the frequency of Pcl micropulsations during a sudden deformation of the magnetosphere: Geomagnetism and Aeronomy, v. 8, no. 5, p. 784-786, illus., table, 1968.

274-338 **Troitskaya, V. A.; Kleymenova, N. G.; Raspopov, O. M.; Geller, L. A.; Roldugin, V. K.; Vigneron, J.; Karchevskiy, Zh.; Loran, J.** Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission: Geomagnetism and Aeronomy, v. 8, no. 6, p. 872-874, illus., 1968.

Troitskiy, S. L. See *Kind, N. V. 272-038*

270-268 **Troitskiy, V. A.** Issledovaniya v magnitno-sopryazhennykh tochkakh [Investigations at magnetically conjugate points]: Akad. SSSR Vestnik, no. 11, p. 68-74, illus., 1968.

Troitskiy, V. N. See *Aue, L. F. 274-249*

Troitskiy, V. S. See *Tikhonova, T. V. 274-073*

Tronov, Yu. A. See *Kononov, V. E. 270-162*

Tronov, Yu. A. See *Ostistyy, B. K. 275-177*

266-475 **Tropin, Yu. D.** O fizicheskom smysle effektivnogo polya magnitnoy vyazkosti [On the physical meaning of the effective field of magnetic viscosity]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 8, p. 98, 1968.

274-367 **Tropin, Yu. D.** Teoriya magnitnoy vyazkosti gornykh porod v spin-volnovom priblizhenii [Theory of magnetic viscosity of rocks in spin-wave approximation]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 81-88, illus., 1969.

275-341 **Tropin, Yu. D.** O veroyatnosti peremagnichivaniya odnodomennykh zeren [On the possibility of remagnetization of single-domain grains]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 85-87, 1969.

275-445 **Troshko, T. N.; Ellanskiy, M. M.** O vozmozhnykh otsenki poristosti produktivnykh vereyskikh otlozheniy Orenburga po promyslovo-geofizicheskim dannym na osnove mnogomernykh statisticheskikh svyazey [On possible appraisals of the porosity of the Verey producing formations of Orenburg according to geophysical logging data on the basis of multidimensional statistical relationships]: Neftegazovaya Geologiya i Geofizika, no. 1, p. 39-42, illus., 1969.

Trubikhin, V. M. See *Gurariy, G. Z. 265-449*

Trubyatchinskiy, N. N. See *Demenitskaya, R. M. 269-470*

Trubyatchinskiy, N. N. See *Gorodnitskiy, A. M. 273-200*

Trubyatchinskiy, N. N. See *Gorodnitskiy, A. Am. 273-210*

Trubyatchinskiy, N. N. See *Litvinov, E. M. 274-459*

Trudell, Laurence G. See *Smith, James Ward. 272-540*

266-339 **Trudu, Renato.** Sulla correzione topografica ravvicinata in gravimetria [On reconciled topographic corrections in gravimetry (with English abs.)], *in* Assoc. Geofisica Italiana Convegno, 15th Ann., Rome, 1966, Atti: Rome, Consiglio Nazionale Ricerche, p. 517-522, illus., table [1967,].

265-688 **Trufanov, V. V.; Bernshteyn, D. A.; Galyavich, A. Sh.** Pribor dlya opredeleniye plotnosti zhidkosti v deystvuyushchikh skvazhinakh [Device for the determination of density of a fluid in operating wells]: Geofiz. Apparatura, no. 32, p. 97-104, illus., 1967.

Trufanov, V. V. See *Vedekhin, A. F. 267-639*

Trufanov, V. V. See *Bernshteyn, D. A. 270-522*

Trufanov, V. V. See *Komarov, S. G. 273-507*

Trum, A. D. See *Belyy, G. P. 272-559*

267-390 **Truttse, Yu. L.** Upper atmosphere during geomagnetic disturbances—[Pt.] 1, Some regular features of low-latitude auroral emissions: Planetary and Space Sci., v. 16, no. 8, p. 981-992, illus., table, 1968.

267-392 **Truttse, Yu. L.** Upper atmosphere during geomagnetic disturbances—[Pt.] 2, Geomagnetic storms, oxygen emission at 6300 A and heating of the upper atmosphere: Planetary and Space Sci., v. 16, no. 10, p. 1201-1208, illus., table, 1968.

267-211 **Tryggvason, Eysteinn.** Measurement of surface deformation in Iceland by precision leveling: Jour. Geophys. Research, v. 73, no. 22, p. 7039-7050, illus., 1968.

272-098 **Tsai, Yi-Ben; Aki, Keiiti.** Simultaneous determination of the seismic moment and attenuation of seismic surface waves: Seismol. Soc. America Bull., v. 59, no. 1, p. 275-287, illus., table, 1969.

Tsankov, Ts. See *Bonchev, E. 272-116*

270-194 **Tsaregradskiy, V. A.** Regular long-period variations in the velocity of the Earth's rotation and related deformations of the Earth's crust, *in* The Earth and the Universe: Springfield, Virginia, Federal Clearinghouse Sci. and Tech. Inf., p. 194-211, illus., 1968; translated from Russian, *in* Zemlya vo vselennoy: Moscow, Izdatel'stvo " MYSL," 1964.

271-301 **Tsaregradskiy, V. A.; Serdyukov, M. K.** Vysokotochnaya gravimetriya pri vyyavlenii mestorozhdeniy poleznykh iskopayemykh v Kazakhstane [High-precision gravimetry in bringing out deposits of useful minerals in Kazakhstan]: Akad. Nauk Kazakh. SSR Izv. Ser. Geol., no. 5, p. 10-22, illus., table, 1968.

265-676 **Tsaturyan, A. A.** Beszamolo a groznuj-i terulet mely es szupermely furasaiban vegzett ipari-geofizikai viszgalatokrol [Report on geophysical logging investigations carried out in deep and ultradeep boreholes in the Grozny district]: Magyar Geofizika, v. 9, no. 1, p. 20-23, table, 1968.

Tsekov, G. D. See *Davydov, V. M. 271-135*

Tsibul'chik, G. M. See *Zhalkovskiy, N. D. 264-136*

266-403 **Tsibul'chik, G. M.** O godografakh seysmicheskikh voln i stroyenii zemnoy kory Altaye-Sayanskoy oblasti [On seismic wave traveltime curves and crustal structure in the Altay-Sayan district], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 159-169, illus., table, 1967.

Tsibul'chik, I. D. See *Zhalkovskiy, N. D. 264-136*

Tsibul'chik, I. D. See *Zhalkovskiy, N. D. 265-172*

Tsirel', V. S. See *Korennoy, Ye. P. 271-391*

Tsirs, G. P. See *Kleymenova, N. G. 274-347*

266-236 **Tsitsishchvili, D. A.** Geoelektricheskaya kharakteristika otdel'nykh uchastkov territorii Gruzii, podverzhennykh aktivnym deystviyam ekzodinamicheskikh protsessov [Geoelectric characteristics of individual parts of the territory of Georgia, subjected to the active action of exodynamic processes]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 207-221, illus., 1966.

266-235 **Tsitsishvili, D. A.; Chkhenkeli, Sh. M.; Tabagua, G. G.; Daneliya, K. K.** Elektrorazvedka pri izuchenii fil'tratsionnykh yavleniy na uchastkakh Sionskogo vodokhranilishcha [Electrical surveying in the study of filtration phenomena on parts of the Sioni reservoir]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 197-206, illus., 1966.

272-179 **Tsitsishvili, D. A.; Tabagua, G. G.; Tatishvili, G. V.** Geoelektricheskaya kharakteristika plyazhevoy polosy Chernomorskogo poberezh'ya Gruzii [Geoelectrical description of the beach belt of the Black Sea shore of Georgia]: Tbilisi, Akad. Nauk Gruzin. SSR Inst. Geologii (Izdatel'stvo "Metsniyereba"), 74 p., illus., 1968.

264-131 **Tskhakaya, A. D.** (and others). Zemletryaseniya Kavkaza [Earthquakes in the Caucasus], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 15-33, illus., tables, 1967.

264-146 **Tskhakaya, A. D.; Makhatadze, L. N.; Tabidze, D. D.** Chkhaltinskoy zemletryaseniye [The Chkhalta earthquake]: Tbilisi, Izdatel'stvo "Metsniyereva," 54 p., illus., tables, 1967.

265-166 **Tskhakaya, A. D.; Dzhibladze, E. A.; Papalashvili, V. G.; Lebedeva, T. M.; Maysuradze, O. M.; Tabutsadze, Ts. A.; Darakhvelidze, L. K.; Kakhiani, L. A.; Labadze, L. V.** Zemletryaseniya Kavkaza [Earthquakes in the Caucasus], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 20-33, illus., tables, 1967.

266-162 **Tskhakaya, A. D.** K voprosu seysmichnosti rayone g. Yerevan i prilegayushchikh yego oblasti [On the problem of the seismicity of the region of Yerevan and its environs]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 17-27, illus., tables, 1966.

272-567 **Tslav, L. Z.; Laptev, V. V.** Ispol'zovaniye kompleksa radiometricheskikh metodov dlya opredeleniya polozheniya vod-neftyanogo razdela v karbonatnykh kollektorakh [Use of a combination of radiometric methods to determine the position of the water-oil interface in carbonate reservoirs], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 226-234, illus., 1968.

Tsobun, Ya. M. See *Krylov, A. Ya. 272-033*

Tsogoyev, V. B. See *Sukharev, G. M. 266-368*

Tsoy, A. V. See *Shavlo, S. G. 274-281*

Tsubokawa, I. See *Rikitake, T. 265-357*

264-118 **Tsubokawa, Ietsune; Dambara, Takeshi; Okada, Atusi.** Crustal movements before and after the Niigata earthquake, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 129-139, illus., 1968.

266-320 **Tsubokawa, Ietsune; Okada, Atusi; Izutuya, Sadakatu; Ito, Yutaka; Kadono, Koe.** Levelling resurvey associated with the area of Matsushiro earthquake swarms, [Pt.] 2 [in Japanese with English abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 417-429, illus., tables, 1968.

264-547 **Tsuchi, Ryuichi.** Geologic survey of the eastern Indian Ocean by the Umitakamaru International Indian Ocean Expedition in the winter of 1963-1964: Shizuoka Univ. Fac. Sci. Repts., v. 2, p. 43-54, illus., tables, 1967.

264-106 **Tsujiura, Masaru.** Frequency analysis of seismic waves, [Pt.] 2 [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 45, pt. 4, p. 973-995, illus., tables, 1967.

265-236 **Tsumura, Akinobu.** The mechanism of the remarkable anomalies of the spontaneous electric potentials—[Pt.] 1, On the potential anomalies observed around the metallic ore bodies [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 1, p. 30-42, illus., 1968.

269-248 **Tsumura, Akinobu.** The mechanism of the remarkable anomalies of the spontaneous electric potentials—[Pt.] 2, On the potential anomaly observed in siliceous rocks without the relation with a metallic ore body [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 4, p. 224-231, illus., table, 1968.

Tsutskarev, B. M. See *Ivanov, M. M. 271-395*

Tsvetkov, O. S. See *Gorshkov, G. V. 275-356*

Tsykin, Ye. N. See *Psareva, T. V. 268-256*

Tsykina, G. A. See *Psareva, T. V. 268-256*

267-048 **Tuayev, A. S.** Ob absolyutnom vozraste terrigennykh komponentov produktivnoy tolshchi Azerbaydzhana [On the absolute age of the clastic components of the producing series of Azerbaijan], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 67, 1967.

269-253 **Tucker, L. R.** Geophysical activity in 1967 applied to petroleum exploration: Geophysics, v. 33, no. 6, p. 885-902, illus., tables, 1968.

265-103 **Tucker, William; Herrin, Eugene; Freedman, Helen W.** Some statistical aspects of the estimation of seismic travel times: Seismol. Soc. America Bull., v. 58, no. 4, p. 1243-1260, illus., tables, 1968.

Tucker, William. See *Herrin, Eugene. 265-105*

273-395 **Tudose, Elvira; Ciocanelea, R.** Interpretarea geologica a masuratorilor magnetice efectuate intre Dunare si Stinapari (zona Resita-Moldova Noua) [Geologic interpretation of magnetic measurements carried out between the Danube and Stinapari (Resita-Moldova Noua zone) (with English and French abs.)]: Romania Com. Geol. Dari de Seama Sed., v. 53 (1965-66), no. 3, p. 119-133, illus., 1968.

Tugarinov, A. I. See *Vinogradov, A. P. 269-070*

272-040 **Tugarinov, A. I.; Bibikova, Ye. V.; Goroshchenko, G. L.** O vozraste granulitov Baltiyskogo shchita [On the age of the granulites of the Baltic shield (with English summ.)]: Geokhimiva, no. 9, p. 1052-1060, illus., table, 1968.

Tugolesov, D. A. See *Savinskiy, K. A. 266-358*

Tulina, Yu. V. See *Gaynanov, A. G. 268-315*

Tulina, Yu. V. See *Mikhota, G. G. 273-464*

Tully, M. C. See *McQuillin, R. 274-432*

275-185 **Tully, P. C.; Stroud, Lowell.** Helium—Bibliography of technical and scientific literature, 1962, including papers on alpha particles: U.S. Bur. Mines Inf. Circ. 8398, 367 p., 1969.

265-278 **Tulsa University.** Exploration and production thesaurus (3d edition): Tulsa, Okla., University of Tulsa, Inf. Services Dept., 260 p., 1968; originally published 1965.

Tulupov, V. I. See *Lebedinskiy, A. I. 268-098*

273-198 **Tulyaganov, Kh. T.; Umurzakov, K. R.** O geofizicheskikh metodakh izucheniya gidrogeologicheskikh usloviy predgornykh ravnin [On geophysical methods of studying the hydrogeologic conditions of plains at the foot of mountains]: Uzbek. Geol. Zhur., no. 1, p. 3-10, illus., tables, 1969.

270-472 **Tunn, Walter.** Determination of some important petrophysical data of oil and gas reserves and comparison of values obtained by different methods: Log Analyst, v. 8, no. 1, p. 35-45, illus., tables, 1967.

Tupper, W. M. See *Shafiqullah, M. 270-024*

Turchanenko, N. T. See *Subbotin, S. I. 268-333*

Turchanenko, N. T. See *Subbotin, S. I. 269-372*

Turchenko, S. I. See *Kotov, N. V. 272-247*

269-303 **Turcotte, D. L.; Oxburgh, E. R.** A fluid theory for the deep structure of dip-slip fault zones: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 381-386, illus., 1968.

271-178 **Turcotte, D. L.; Oxburgh, E. R.** Convection in a mantle with variable physical properties: Jour. Geophys. Research, v. 74, no. 6, p. 1458-1474, illus., tables, 1969.

272-019 **Turek, A.; Peterman, Z. E.** Preliminary Rb-Sr geochronology of the Rice Lake-Beresford Lake area, southeastern Manitoba: Canadian Jour. Earth Sci., v. 5, no. 6, p. 1373-1380, illus., table, 1968.

Turemuratov, Zh. S. See *Avrov, P. Ya. 269-661*

Turkevich, A. L. See *Franzgrote, E. J. 268-083*

265-094 **Turkevich, Anthony L.; Franzgrote, Ernest J.; Patterson, James H.** Chemical analysis of the Moon at the Surveyor VII landing site—Preliminary results: Science, v. 162, no. 3849, p. 117-118, illus., table, 1968.

270-048 **Turkevich, Anthony L.; Patterson, James H.; Franzgrote, Ernest J.** The chemical analysis of the lunar surface: Am. Scientist, v. 56, no. 4, p. 312-343, illus., tables, 1968.

275-055 **Turkevich, Anthony L.; Franzgrote, Ernest J.; Patterson, James H.** Chemical composition of the lunar surface in Mare Tranquillitatis: Science, v. 165, no. 3890, p. 277-279, illus., tables, 1969.

275-076 **Turkevich, Anthony L.; Anderson, Wayne A.; Economou, Thanasis E.; Franzgrote, Ernest J.; Griffin, Harry E.; Grotch, Stanley L.; Patterson, James H.; Sowinski, Kenneth P.** The alpha-scattering chemical analysis experiment on the Surveyor lunar missions, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 303-387, illus., 1969.

Turlov, P. A. See *Lerner, B. L. 271-527*

Turlychkina, L. M. See *Kantsel', A. V. 268-171*

272-207 **Turner, D. C.** A gravity interpretation of the Liruei ring complex, Nigeria: Geol. Mag., v. 106, no. 1, p. 95-97, illus., 1969.

Tutberidze, N. P. See *Sikharulidze, D. I. 266-161*

270-063 **Tuthill, Samuel J.; Field, William O.; Clayton, Lee.** Postearthquake studies at Sherman and Sheridan Glaciers, *in* The great Alaskan earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 318-328, illus., tables, 1968.

Tuve, M. A. See *Casaverde, M. 273-166*

264-523 **Tuyezov, I. K.; Umperovich, N. V.** Ob izuchenii poverkhnosti doyurskogo fundamenta Zapadno-Sibirskoy nizmennosti metodom otrazhennykh voln [Study of the surface of the pre-Jurassic basement of the West Siberian Lowland by the method of reflected waves]: Sibir. Nauchno-Issled. Inst. Geologii, Geofizikii Mineral'nogo Syr'ya, Trudy, no. 30, p. 75-81, illus., 1964.

266-402 **Tuyezov, I. K.; Sychev, P. M.; Pavlov, Yu. A.; Gimpel'son, M. S.** Plotnostnyye neodnorodnosti veshchestva verkhney mantii Zemli v yuzhnoy chasti Sovetskogo sektora zony perekhoda ot Aziatskogo kontinenta k Tikhomu okeanu [Density inhomogeneities in upper mantle matter in the southern part of the Soviet sector of the transition zone from the Asiatic continent to the Pacific Ocean], *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 149-158, illus., 1967.

Tuyezov, I. K. See *Gaynanov, A. G. 268-315*

268-320 **Tuyezov, I. K.; Sychev, P. M.; Tarakanov, R. Z.; Krasny, M. L.** Structure of the folded areas and recent geosynclines of the Okhotsk area, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 473-480. illus., 1968.

268-354 **Tuyezov, I. K.; Tarakanov, R. Z.; Siryk, I. M.; Pavlov, Yu. A.** Neodnorodnosti zemnoy kory i verkhney mantii yuzhnoy chasti sovetskogo sektora Tikhookeanskogo kol'tsa v svete geologo-geofizicheskikh dannykh [Inhomogeneities of the Earth's crust and upper mantle in the southern part of the Soviet sector of the Pacific Ocean rim in the light of geologic and geophysical data]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 7, p. 72-81, illus., 1968.

Tuyezov, I. K. See *Suvorov, A. A. 270-410*

Tuyezov, I. K. See *Sergeyev, K. F. 271-217*

Tuyezov, I. K. See *Van'yan, L. L. 275-164*

Tuyezov, I. K. See *Milashin, A. P. 275-371*

266-164 **Tvaltvadze, G. K.; Ioseliani, M. S.; Sikharulidze, D. I.; Kartsivadze, G. K.** K voprosu stroyeniya zemnoy kory zapadnoy chasti Adzharo-Trialetskoy skladchatoy sistemy [On the problem of the structure of the Earth's crust of the western part of the Adzhara-Trialet folded system]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 81-86, illus., 1966.

266-529 **Tvaltvadze, G. K.; Ioseliani, M. S.; Makharadze, R. K.** K voprosu izucheniya stroyeniya osadochnogo kompleksa i morfologii poverkhnosti kristallicheskogo fundamenta v polose Lagodekhi-Akstafa po seysmicheskim dannym [On the problem of studying the structure of the sedimentary complex and the shape of the surface of the crystalline basement in the Lagodekhi-Akstafa belt on the basis of seismic data]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 24, no. 1, p. 53-80, illus., 1966.

Tverdokhlebov, V. A. See *Odintsov, M. M. 268-232*

Tveritin, Ye. G. See *Kuznetsov, G. F. 266-493*

Twiss, P. C. See *Wilson, John Andrew. 264-014*

273-162 **Tyablikov, Yu. Ye.; Oganesyan, A. T.** Novoye gidravlicheskoye oborudovaniye dlya ispytaniya sooruzheniy na seysmostoykost' i vibroustoychivost' [New hydraulic equipment for testing structures for earthquake resistance and resistance to vibration], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 99-117, illus., table, 1968.

273-475 **Tyan, A. V.** Perspektivy neftegazonosnosti Karasorskogo podnyatiya v yuzhnoy chasti Turgayskogo progiba [Prospects for oil and gas in the Karasorsk uplift in the southern part of the Turgay depression], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 48-50, 1964.

265-325 **Tyapkin, K. F.** Graficheskiye metody interpretatsii gravitatsionnykh anomaliy [Graphic methods of interpreting gravity anomalies]: Moscow, Izdatel'stvo "Nedra," 226 p., illus., tables, 1968.

265-331 **Tyapkin, K. F.** Paletki dlya postroyeniya vertikal'nykh razrezov po dannym gravimetrii s uchetom izmeneniya plotnosti porod s glubinnoy [Master curves for plotting vertical sections from gravimeter data taking into account variations of rock density with depth]: Razved. Geofizika, no. 24, p. 49-54, illus., 1967.

269-274 **Tyapkin, K. F.; Belanov, V. M.; Kozubskaya, G. Ye.; Nechayev, V. A.; Raspopova, M. G.; Kharitonov, V. D.** Izucheniya blokovoy tektoniki Ukrainskogo shchita geofizicheskimi metodami [Study of the block tectonics of the Ukrainian shield by geophysical methods (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 129-133, illus., 1968.

271-258 **Tyapkin, K. F.; Stovas, G. M.** Problema peremishchennya polyusiv i mozhlyvist' vyznachennya viku tektonichnykh struktur [The problem of displacement of the poles and the possibility of determining the age of tectonic structures (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovidi, ser. B, no. 5, p. 438-441, 1968.

271-300 **Tyapkin, K. F.; Gontarenko, V. N.** Vykorystannya zalyshkovykh hravitatsiynykh anomaliy dlya vyznachennya parametriv dvovymirnykh ob'yektiv skladnoyi formy [Use of residual gravity anomalies for determining the parameters of two-dimensional bodies of complex shape (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovidi, ser. B, no. 11, p. 1006-1008, 1968.

272-225 **Tyapkin, K. F.; Gontarenko, V. N.** Vykorystannya horyzontal'nykh pryrostiv pershykh pokhichnykh hravitatsiynoho potentsialu dlya vyznachennya parametriv dvovymirovykh til [Use of horizontal increments of the first derivatives of the gravitational potential for determining the parameters of two-dimensional bodies (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovidi, ser. B, no 12, p. 1077-1080, 1968.

Tyapkin, K. F. See *Samarskiy, R. Ya. 274-250*

275-348 **Tyapkin, K. F.; Gontarenko, V. N.** Ispol'zovaniye ostatochnykh magnitnykl anomaliy dlya opredeleniya parametrov dvukhmernykh ob''yektov slozhnoy form [Use of residual magnetic anomalies for determining the parameters of two-dimen sional objects of complex shape]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 70 74, 1969.

Tychinskiy, A. A. See *Anan'yev, F. M. 264-319*

266-075 **Tyler, G. L.** Brewster angle of the lunar crust: Nature, v. 219, no. 5160, p. 1243 1244, illus., 1968.

268-043 **Tyler, G. L.** Oblique-scattering radar reflectivity of the lunar surface—Prelimina ry results from Explorer 35: Jour. Geophys. Research, v. 73, no. 24, p. 7609-7620, il lus., table, 1968.

Tynni, Risto. See *Repo, Reino. 264-031*

Tyuremnov, V. A. See *Belenitskaya, G. A. 268-168*

267-153 **Tyuremnov, V. A.** Uprugiye svoystva nekotorykh tipov izverzhennykh poro tsentral'noy chasti Kol'skogo poluostrova [Elastic properties of some types of igne ous rocks from the central part of the Kola Peninsula], *in* Geofizika i tektonika Kol skogo poluostrova: Moscow, Akad. Nauk Kol'skiy Filial, p. 37-42, illus., table, 1968.

Tyuremnov, V. A. See *Kozlov, M. T. 268-246*

264-369 **Tyurmina, L. O.; Cherevko, T. N.** Some results of a spherical harmonic analysi of the geomagnetic field from Cosmos 49 data: Geomagnetism and Aeronomy, v. no. 6, p. 917, table, 1967.

273-370 **Tyurmina, L. O.** Analytical model of the geomagnetic field according to Cosmo 49 data: Geomagnetism and Aeronomy, v. 8, no. 5, p. 786-788, illus., tables, 1968.

Tyurmina, L. O. See *Kolomiytseva, G. I. 274-336*

Tyvin, L. I. See *Ivanov, V. F. 270-524*

Tzur, Y. See *Gat, Joel R. 274-298*

269-260 **U Aung Khin.** Methods and techniques applied to petroleum exploration in th Union of Burma, *in* ECAFE Symposium, 3d, on Development of Petroleu Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAF Mineral Resources Devel. Series, no. 26, p. 331-333, 1967.

Uchibayashi, Seiji. See *Hara, Ikuo. 273-485*

Uchman, Jan. See *Guterch, Aleksander. 271-319*

268-541 **Uchupi, E.** Long lost Mytilus: Oceanus, v. 14, no. 3, p. 2-7, illus., 1968.

266-509 **Uchupi, Elazar; Emery, K. O.** Structure of continental margin off Gulf Coast United States: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 7, p. 1162-1193, lus., 1968.

Uchupi, Elazar. See *Zarudzki, E. F. K. 267-577*

269-603 **Uchupi, Elazar.** Tortugas Terrace, a slip surface?, *in* Geological Survey resear 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D231-D234, illus., 1968.

271-508 **Uchupi, Elazar.** Seismic profiling survey of the east coast submarine canyons—Pt. 1, Wilmington, Baltimore, Washington and Norfolk Canyons: Deep-Sea Research, v. 15, no. 5, p. 613-616, illus., 1968.

Uchupi, Elazar. See *Sanders, J. E. 271-544*

274-080 **Udias, Agustin; Baumann, Dieter.** A computer program for focal mechanism determination combining P and S wave data: Seismol. Soc. America Bull., v. 59, no. 2, p. 503-519, illus., tables, 1969.

Udintsev, G. B. See *Gaynanov, A. G. 269-472*

274-246 **Udintsev, G. B.** O strukture riftovoy zony Indiyskogo okeana [On the structure of the rift zone of the Indian Ocean]: Akad. Nauk SSSR Doklady, v. 185, no. 4, p. 921-924, illus., 1969.

Udintsev, G. B. See *Sagalevich, A. M. 274-439*

275-382 **Udintsev, G. B.; Beresnev, A. F.; Sagalevich, A. M.** Sovetsko-Yaponskoye sotrudnichestvo po morskoy geofizike [Soviet-Japanese cooperation in marine geophysics]: Akad. Nauk SSSR Vestnik, no. 5, p. 93-96, illus., 1969.

Ueda, Herbert T. See *Gow, Anthony J. 264-234*

Ueda, S. See *Kume, S. 273-317*

264-035 **Ueda, Yoshio; Aoki, Ken-ichiro.** K-Ar dating on the alkaline rocks from Nemuro, Hokkaido [in Japanese with English abs.]: Japanese Assoc. Mineralogists, Petrologists and Econ. Geologists Jour., v. 59, no. 6, p. 230-235, illus., tables, 1968.

268-026 **Ueda, Yoshio; Onuki, Hitoshi.** K-Ar dating on the metamorphic rocks in Japan—[Pt.] 1, Yatsushiro gneisses, Kiyama and Sonogi metamorphic rocks in Kyushu [in Japanese with English abs.]: Japanese Assoc. Mineralogists, Petrologists, and Econ. Geologists Jour., v. 60, no. 4, p. 159-166, illus., tables, 1968.

Ueda, Yoshio. See *Matsumoto, Tatsuro. 273-017*

274-021 **Ueda, Yoshio; Yamaoka, Kazuo; Onuki, Hitoshi; Tagiri, Michio.** K-Ar dating on the metamorphic rocks in Japan—[Pt.] 2, The Hitachi metamorphic rocks in southern Abukuma Plateau [in Japanese with English abs.]: Japanese Assoc. Mineralogists, Petrologists and Econ. Geologists Jour., v. 61, no. 3, p. 92-99, illus., tables, 1969.

275-022 **Ueda, Yoshio; Onuki, Hitoshi.** K-Ar dating on the metamorphic rocks in Japan—[Pt.] 1, Yatsushiro, Kiyama, Chikugo, Higo, and Sonogi metamorphic rocks in Kyushu: Tohoku Univ. Sci. Repts., ser. 3, v. 10, no. 3, p. 313-321, illus., tables, 1969.

275-336 **Ueno, Hirotomo; Yamaoka, Kazuo.** Paleomagnetic studies on the genesis of magnetite in the Hanawa black ore deposit, Akita Prefecture, Japan: Tohoku Univ. Sci. Repts., ser. 3, v. 10, no. 3, p. 323-332, illus., tables, 1969.

Ueno, N. See *Ozima, M. 268-027*

Ulanov, O. I. See *Kadukhin, G. F. 265-422*

Uliana, E. A. See *Shapiro, A. 268-096*

265-133 **Ullmann, Wolfgang; Maaz, Richard.** Zur Bestimmung der Seismizitat aus makroseismischen Daten [On the determination of seismicity from macroseismic data (with Russian summ.)]: Ceskoslovenska Akad. Ved Studia Geophys. et Geod., v. 12, no. 3, p. 286-290, 1968.

Ulomov, V. See *Mavlyanov, G. 270-073*

Ulomov, V. I. See *Mavlyanov, G. A. 264-155*

Ulomov, V. I. See *Korzhauv, T. K. 266-165*

Ulrich, Hans Jurgen. See *Hahn, Albrecht. 273-382*

269-325 **Ulrych, T. J.** Effect of wavelength filtering on the shape of the residual anomaly: Geophysics, v. 33, no. 6, p. 1015-1018, illus., 1968.

272-004 **Ulrych, T. J.** Oceanic basalt leads and the age of the Earth: Science, v. 162, no. 3856, p. 928, 1968.

Ulrych, T. J. See *Allsopp, H. L. 275-009*

Ul'st, V. G. See *Levin, L. E. 267-200*

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Umantsev, D. F. See *Surkov, V. S. 269-270*

272-124 **Umeda, Yasuhiro.** A study on attenuation of seismic waves in the vicinity of Matsushiro, [Pt.] 1: Zisin, ser. 2, v. 21, no. 3, p. 169-177, illus., table, 1968.

272-285 **Umemoto, Shunji.** Determination of U-234:/U-238 of uranium in natural materials [with Japanese abs.]: Okayama Univ. Inst. Thermal Spring Research Papers, no. 37, p. 1-8, illus., tables, 1967.

272-286 **Umemoto, Shunji.** The isotopic ratio U-234:U-238 of the ores and waters in Togo mine, Tottori-ken, Japan [in Japanese with English abs.]: Okayama Univ. Inst. Thermal Spring Research Papers, no. 37, p. 31-36, illus., tables, 1967.

Umemura, Hayao. See *Hara, Ikuo. 273-485*

Umperovich, N. V. See *Tuyezov, I. K. 264-523*

266-530 **Umperovich, N. V.** Rol' zhestkikh granits razdela v verkhney chasti razreza Zapadno-Sibirskoy plity v formirovanii volnovoy kartiny [Role of rigid discontinuities in the upper part of the section of the West Siberian plate in the formation of the wave pattern]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no 3, p. 66-73, 1968.

Umurzakov, K. R. See *Tulyaganov, Kh. T. 273-198*

274-191 **Umyshev, R.; Gennadinik, B. I.** K voprosu o vozmozhnosti ispol'zovaniya integral'nykh uravneniy pri reshenii pryzmoy zadachi elektrorazvedki postoyannom tokom [On the problem of the possibility of using integral equations in solving the direct problem of electrical surveying by d.c. current]: Akad. Nauk Kazakh. SSR Izv Ser. Geol., no. 1, p. 79-83, illus., 1969.

Undzenkov, B. A. See *Ivanov, N. A. 269-446*

267-114 **UNESCO Tech. Assistance Mission.** The Skopje earthquake of 26 July 1963: Amsterdam, Netherlands, UNESCO, 152 p., illus., 1968.

268-367 **Unti, T.; Atkinson, G.** Two-dimensional Chapman-Ferraro problem with neutra sheet—[Pt.] 1, The boundary: Jour. Geophys. Research, v. 73, no. 23, p. 7319-7327 illus., 1968.

Unti, T. See *Atkinson, G. 274-315*

274-175 **Unz, M.** Vertical profiling over a medium of continuously varying resistivity Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 427-435, illus., table, 1968.

Upadhyay, S. K. See *Negi, Janardan G. 266-187*

Urabe, Kazunori. See *Morimoto, Ryohei. 270-455*

Urabe, Tatsuo. See *Shimazu, Yasuo. 266-389*

69-474 **Urazayev, I. M.** Glubinnoye stroyeniye kristallicheskogo fundamenta Tatarii i severnykh rayonov Kuybyshevskoy oblasti po dannym interpretatsii anomaliy geomagnitnogo polya [Deep structure of the crystalline basement of Tatary and the northern regions of the Kuybyshev Region according to data of interpretation of anomalies of the geomagnetic field], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 152-157, illus., tables, 1966.

69-475 **Urazayev, I. M.; Gerasimov, Yu. P.** K metodike trassirovaniya razlomov po anomaliyam geomagnitnogo polya v platformennykh oblastyakh [On the procedure of tracing faults on the basis of anomalies of the geomagnetic field in platform regions], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 162-166, illus., 1966.

74-382 **Urazayev, I. M.** Stroyeniye i sostav zemnoy kory v Volgo-Kamskom rayone po geomagnitnym dannym [Structure and composition of the Earth's crust in the Volga-Kama region according to geomagnetic data]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 72-80, illus., table, 1969.

64-071 **Urey, Harold C.; Marti, Kurt.** Surveyor results and the composition of the Moon: Science, v. 161, no. 3845, p. 1030-1032, illus., tables, 1968.

66-056 **Urey, Harold C.** The origin of some meteorites from the Moon: Naturwissenschaften, v. 55, no. 2, p. 49-57, illus., table, 1968.

68-051 **Urey, Harold C.** Mascons and the history of the Moon: Science, v. 162, no. 3860, p. 1408-1410, 1968.

68-069 **Urey, Harold C.** The contending moons: Astronautics and Aeronautics, v. 7, no. 1, p. 37-41, illus., 1969.

71-546 **Urien, Carlos M.; Mouzo, Félix.** Algunos aspectos morfologicos de la plataforma continental en las proximidades del Rio de la Plata [Some morphologic aspects of the continental platform in the neighborhood of the Plata River (with English abs.)]: Argentina Republica Servicio Hidrografia Naval Bol., v. 4, no. 3, p. 287-294, illus., 1967.

71-547 **Urien, Carlos M.** Estado de los estudios de geologia marina en la plataforma continental hasta 1967 [State of the studies of marine geology on the continental platform up to 1967 (with English abs.)]: Argentina Republica Servicio Hidrografia Naval Bol., v. 5, no. 1, p. 5-13, 1968.

71-525 **Urupov, A. K.; Voskresenskiy, Yu. N.; Uteshev, V. I.** O vyyavlenii kvazidispersii seysmicheskikh voln po dannym MRNP [On showing up quasi-dispersion of seismic waves on the basis of controlled direction pickup data]: Neftegazovaya Geologiya i Geofizika, no. 11, p. 32-36, illus., 1968.

Urusovskaya, A. A. See *Klassen-Neklyudova, M. V. 268-595*

64-244 **U.S. Air Force.** (Aeronaut. Chart and Inf. Center, compiler). Transcontinental geophysical survey (35°-39° N)—Bouguer gravity map from 112° W longitude to the coast of California: U.S. Geol. Survey Misc. Geol. Inv. Map I-532-B, scale 1:1,000,000, 1968.

65-312 **U.S. Air Force.** (Aeronaut. Chart and Inf. Center, compiler). Transcontinental geophysical survey (35°-39° N)—Bouguer gravity map from 74° to 87° W longitude: U.S. Geol. Survey Misc. Geol. Inv. Map I-535-B, scale 1:1,000,000, 1968.

67-108 **U.S. Bureau of Reclamation.** Earthquake activity in western United States—Dams Branch Report No. DD-8: Denver, Colo., U.S. Bur. Reclamation, 23 p., illus., tables, 1968.

264-540 **U.S. Coast and Geodetic Survey.** United States—East coast, Maine, Casco Bay- Soundings (C. and G. S. 315, 15th edition): Washington, D. C., U.S. Coast and Geo Survey, scale 1:40,000, 1968.

264-541 **U.S. Coast and Geodetic Survey.** Atlantic coast, Cape Sable to Cape Hatteras- Soundings (C. and G. S. 1000, 21st edition): Washington, D. C., U.S. Coast ar Geod. Survey, scale 1:1,200,000, 1968.

264-416 **U.S. Geological Survey.** Aeromagnetic map of the Southbridge quadrangle, Wc cester County, Massachusetts, and Windham and Tolland Counties, Connecticu U.S. Geol. Survey Geophys. Inv. Map GP-631, scale 1:24,000, 1968.

264-417 **U.S. Geological Survey.** Aeromagnetic map of the Springfield South quadrangl Hampden County, Massachusetts, and Hartford and Tolland Counties, Connecticu U.S. Geol. Survey Geophys. Inv. Map GP-632, scale 1:24,000, 1968.

265-457 **U.S. Geological Survey.** Aeromagnetic map of the Hot Creek Range regic south-central Nevada: U.S. Geol. Survey Geophys. Inv. Map GP-637, sca 1:250,000, 1968.

U.S. Geological Survey. See *Stanford Univ. School Earth Sci. 266-267*

266-487 **U.S. Geological Survey.** Aeromagnetic map of central Pine County, Minneso and adjacent parts of Wisconsin: U.S. Geol. Survey Geophys. Inv. Map GP-636, sca 1:62,500, 1968.

268-432 **U.S. Geological Survey.** Aeromagnetic map of the Winsted quadrangle and pa of the Torrington and Tolland Center quadrangles, Litchfield and Hartford Counti Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-643, scale 1:24,000, 1969.

269-453 **U.S. Geological Survey.** Aeromagnetic map of the Sharon quadrangle and pa of the Ellsworth and Bashbish Falls quadrangles, Connecticut and New York: U Geol. Survey Geophys. Inv. Map GP-640, scale 1:24,000, 1969.

269-454 **U.S. Geological Survey.** Aeromagnetic map of the South Canaan quadrangle a parts of the Cornwall and Ashley Falls quadrangles, Litchfield County, Connectic U.S. Geol. Survey Geophys. Inv. Map GP-641, scale 1:24,000, 1969.

269-455 **U.S. Geological Survey.** Aeromagnetic map of the Broad Brook quadrangle part of the Manchester quadrangle, Hartford and Tolland Counties, Connecti U.S. Geol. Survey Geophys. Inv. Map GP-647, scale 1:24,000, 1969.

269-456 **U.S. Geological Survey.** Aeromagnetic map of the Stafford Springs quadrar and part of the South Coventry quadrangle, Tolland County, Connecticut: U.S. G Survey Geophys. Inv. Map GP-649, scale 1:24,000, 1969.

269-457 **U.S. Geological Survey.** Aeromagnetic map of the Westford quadrangle and of the Spring Hill quadrangle, Tolland and Windham Counties, Connecticut: Geol. Survey Geophys. Inv. Map GP-650, scale 1:24,000, 1969.

269-458 **U.S. Geological Survey.** Aeromagnetic map of the Thompson quadrangle part of the East Killingly quadrangle, Connecticut and Rhode Island: U.S. Geol. vey Geophys. Inv. Map GP-653, scale 1:24,000, 1969.

270-298 **U.S. Geological Survey.** Aeromagnetic map of the Norfolk quadrangle and of the West Torrington and South Sandisfield quadrangles, Litchfield County, C necticut: U.S. Geol. Survey Geophys. Inv. Map GP-642, scale 1:24,000, 1969.

270-299 **U.S. Geological Survey.** Aeromagnetic map of the New Hartford quadrangle parts of the Collinsville and West Granville quadrangles, Litchfield and Hart Counties, Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-644, s 1:24,000, 1969.

270-300 **U.S. Geological Survey.** Aeromagnetic map of the Tariffville quadrangle and parts of the Avon and Southwick quadrangles, Connecticut and Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-645, scale 1:24,000, 1969.

270-301 **U.S. Geological Survey.** Aeromagnetic map of the Ellington quadrangle and part of the Rockville quadrangle, Hartford and Tolland Counties, Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-648, scale 1:24,000, 1969.

271-379 **U.S. Geological Survey.** Aeromagnetic map of the Windsor Locks quadrangle and part of the Hartford North quadrangle, Hartford North quadrangle, Hartford County, Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-646, scale 1:24,000, 1969.

271-380 **U.S. Geological Survey.** Aeromagnetic map of the Putnam quadrangle and part of the Danielson quadrangle, Windham County, Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-652, scale 1:24,000, 1969.

271-381 **U.S. Geological Survey.** Aeromagnetic map of Beach Hill and vicinity, New Hampshire and Vermont: U.S. Geol. Survey Geophys. Inv. Map GP-656, scale 1:62,500, 1969.

273-404 **U.S. Geological Survey.** Aeromagnetic map of the Eastford quadrangle and part of the Hampton quadrangle, Tolland and Windham Counties, Connecticut: U.S. Geol. Survey Geophys. Inv. Map GP-651, scale 1:24,000, 1969.

273-405 **U.S. Geological Survey.** Aeromagnetic map of the First Connecticut Lake and vicinity, northern New Hampshire: U.S. Geol. Survey Geophys. Inv. Map GP-654, scale 1:62,500, 1969.

273-406 **U.S. Geological Survey.** Aeromagnetic map of the Colebrook-Umbagog Lake area, New Hampshire and Vermont: U.S. Geol. Survey Geophys. Inv. Map GP-655, scale 1:62,500, 1969.

273-407 **U.S. Geological Survey.** Aeromagnetic map of the Williamsburg quadrangle and part of the Shelburne Falls quadrangle, Franklin and Hampshire Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-659, scale 1:24,000, 1969.

273-408 **U.S. Geological Survey.** Aeromagnetic map of the Easthampton quadrangle, Hampshire and Hampden Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-661, scale 1:24,000, 1969.

273-409 **U.S. Geological Survey.** Aeromagnetic map of the Mt. Holyoke quadrangle, Hampshire and Hampden Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-662, scale 1:24,000, 1969.

273-410 **U.S. Geological Survey.** Aeromagnetic map of the Belchertown quadrangle, Hampshire County, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-663, scale 1:24,000, 1969.

273-411 **U.S. Geological Survey.** Aeromagnetic map of the Winsor Dam quadrangle, Hampshire, Worcester, and Franklin Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-664, scale 1:24,000, 1969.

273-412 **U.S. Geological Survey.** Aeromagnetic map of the Ware quadrangle, Worcester, and Hampshire Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-665, scale 1:24,000, 1969.

273-413 **U.S. Geological Survey.** Aeromagnetic map of the North Brookfield quadrangle, Worcester County, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-666, scale 1:24,000, 1969.

273-414 **U.S. Geological Survey.** Aeromagnetic map of the Paxton quadrangle, Worcester County, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-667, scale 1:24,000, 1969.

273-415 **U.S. Geological Survey.** Aeromagnetic map of the Worcester North quadrangle Worcester County, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-668 scale 1:24,000, 1969.

274-383 **U.S. Geological Survey.** Aeromagnetic map of the McNair-Grand Portage area northeastern Minnesota: U.S. Geol. Survey Geophys. Inv. Map GP-639, scal 1:125,000, 1969.

274-384 **U.S. Geological Survey.** Aeromagnetic strip map across the central Sierra Nevada, California: U.S. Geol. Survey Geophys. Inv. Map GP-657, scale 1:125,000 1969.

274-385 **U.S. Geological Survey.** Aeromagnetic map of the Mt. Toby quadrangle and par of the Greenfield quadrangle, Franklin and Hampshire Counties, Massachusetts: U.S Geol. Survey Geophys. Inv. Map GP-660, scale 1:24,000, 1969.

274-386 **U.S. Geological Survey.** Aeromagnetic map of the Custer-Rapid City area southwestern South Dakota: U.S. Geol. Survey Geophys. Inv. Map GP-670, scal 1:62,500, 1969.

274-387 **U.S. Geological Survey.** Aeromagnetic map of the Shrewsbury quadrangle, Worcester County, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-672, scal 1:24,000, 1969.

274-388 **U.S. Geological Survey.** Aeromagnetic map of the Marlboro quadrangle, Middlesex and Worcester Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv Map GP-673, scale 1:24,000, 1969.

274-389 **U.S. Geological Survey.** Aeromagnetic map of the Framingham quadrangle, Middlesex and Worcester Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv Map GP-674, scale 1:24,000, 1969.

274-390 **U.S. Geological Survey.** Aeromagnetic map of the Natick quadrangle, Middlesex and Norfolk Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Map GP-67 scale 1:24,000, 1969.

274-391 **U.S. Geological Survey.** Aeromagnetic map of the Newton quadrangle, Middlesex, Norfolk, and Suffolk Counties, Massachusetts: U.S. Geol. Survey Geophy Inv. Map GP-676, scale 1:24,000, 1969.

274-392 **U.S. Geological Survey.** Aeromagnetic map of the Boston South quadrangl Middlesex, Norfolk, and Suffolk Counties, Massachusetts: U.S. Geol. Surv Geophys. Inv. Map GP-677, scale 1:24,000, 1969.

274-393 **U.S. Geological Survey.** Aeromagnetic map of the Hull quadrangle, Suffolk, No folk, and Plymouth Counties, Massachusetts: U.S. Geol. Survey Geophys. Inv. Ma GP-678, scale 1:24,000, 1969.

274-394 **U.S. Geological Survey.** Aeromagnetic map of the Nantasket quadrangle, Suffol Norfolk, and Plymouth Counties, Massachusetts: U.S. Geol. Survey Geophys. In Map GP-679, scale 1:24,000, 1969.

269-195 **U.S. Office Sci. and Technology.** (Ad Hoc Panel on Earthquake Predictio Earthquake prediction—A proposal for a ten-year program of research: Washingto D. C., Office Sci. and Technology, [134] p., illus., tables, 1965.

264-162 **Usami, Tatsuo; Kotake, Yoshiko; Sato, Yasuo.** Soft core spectrum splitting a related problems of the spheroidal oscillations of an elastic sphere with a homogen ous mantle and core [with Japanese abs.]: Tokyo Univ. Earthquake Research In Bull., v. 45, pt. 4, p. 945-961, illus., table, 1967.

271-312 **Usami, Tatsuo; Sato, Yasuo; Landisman, Mark; Odaka, Toshikazu.** Theoreti seismograms of spheroidal type on the surface of a gravitating elastic sphere—[P 3, Case of a homogeneous mantle with a liquid core [with Japanese abs.]: Tok Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 791-819, illus., 1968.

Ushakov, S. A. See *Stroyev, P. A. 264-270*

Ushakov, S. A. See *Grushinskiy, N. P. 265-332*

Ushakov, S. A. See *Demenitskaya, R. M. 265-360*

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Ushakov, S. A. See *Belov, Yu. P. 273-303*

Ushakov, S. A. See *Gorodnitskiy, A. M. 273-400*

275-210 **Ushakov, S. A.; Grikurov, G. E.** K probleme struktury i proiskhozhdeniya dugi Skosha [On the problem of the structure and origin of the Scotia Arc]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 70, p. 14-20, illus., 1968.

275-148 **Uspenskaya, A. B.; Sobolev, G. A.** P'yezoelektricheskoye pole kvartsevogo sloya [Piezoelectric field of a quartz layer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 51-57, illus., table, 1969.

Ustinova, G. K. See *Lavrukhina, A. K. 269-109*

Ustinova, G. K. See *Lavrukhina, A. K. 269-112*

Utashiro, Shinkichi. See *Matsuzaki, Takuichi. 268-425*

Uteshev, V. I. See *Urupov, A. K. 271-524*

268-532 **Utkin, V. I.; Tonkov, V. V.** Vybor optimal'nykh rezhimov raboty fotoumnozhiteley FEU-35 i FEU-31 [Choice of optimal working regimes of the FEU-35 and FEU-31 photomultipliers], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 99-100, table, 1967.

268-653 **Utkin, V. I.; Tonkov, V. V.** Trekhkanal'nyy snaryad dlya proizvodstva selektivnogo karotazha [Three-channel cartridge for effecting selective logging], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 87-92, illus., 1967.

269-712 **Utkin, V. I.** Osobennosti primeneniya gazorazryadnykh schetchikov pri selektivnom gamma-gamma-karotazha na ugol' [Features of the application of gas-discharge counters in selective gamma-gamma logging on coal], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 83-85, tables, 1967.

265-282 **Uvarova, A. P.** Vnedreniye progressivnykh form organizatsii truda na stadii proyektirovaniya—put' k povysheniyu ekonomicheskoy effektivnosti geofizicheskikh rabot [Introduction of progressive forms of organization of work at the planning stage—A way of increasing the economic efficiency of geophysical operations]: Razved. Geofizika, no. 24, p. 89-91, 1967.

Uyeda, S. See *Rikitake, T. 265-357*

Uyeda, Seiya. See *Yasui, Masashi. 268-292*

268-296 **Uyeda, Seiya; Vacquier, Victor.** Geothermal and geomagnetic data in and around the island arc of Japan, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 349-366, illus., 1968.

270-232 **Uyeda, Seiya; Yasui, Masashi; Sato, Takahiro; Akamatsu, Hideo; Kawada, Kaoru.** Heat flow measurements during the JEDS-6 and JEDS-7 cruises in 1963: Oceanog. Mag., v. 16, nos. 1-2, p. 7-10, illus., 1964; reprinted *in* Rept. JEDS, v. 5-7, 1966.

Uzhba, T. G. See *Podshibyakin, A. K. 266-440*

274-085 **Uzsoy, Safak Z.; Ersoy, Uğur.** Damage to reinforced concrete buildings caused by the July 22, 1967 earthquake in Turkey: Seismol. Soc. America Bull., v. 59, no. 2, p. 631-650, illus., table, 1969.

Vachette, Michelle. See *Papon, Andre. 266-031*

269-020 **Vachette, Michelle.** Étude géochronologique de la Montagne Noire dans le Massif Central français [Geochronological study of the Montagne Noire in the French Massif Central], *in* Études géochronologiques, [Pt.] 2: Clermont Univ. Fac. Sci. Annales, Géologie et Minéralogie, no. 36, pt. 16, p. 31-76, illus., tables, 1967.

275-017 **Vachette, Michelle; Yacé, Ignace.** Sur l'âge au strontium des laves acides du Précambrien de la région de Toumodi en Cote-d'Ivoire [On the strontium age of the acid Precambrian lavas from the Toumodi region on the Ivory Coast]: Acad. Sci. Comptes Rendus, ser. D, v. 268, no. 18, p. 2235-2236, table, 1969.

275-014 **Vachette, Mireille; Blanc, Philippe; Dubertret, Louis.** Détermination de l'âge d'une granodiorite d'Orhaneli, au Sud de Bursa (Anatolie), sa signification régionale [Age determination of a granodiorite from Orhaneli, south of Bursa (Anatolia); its regional significance]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 10, p. 927-930, illus., tables, 1968.

Vacquier, V. See *Sclater, J. G. 270-226*

Vacquier, Victor. See *Uyeda, Seiya. 268-296*

Vacquier, Victor. See *Warren, Robert E. 275-250*

Vadkovskiy, V. N. See *Barsukov, O. M. 267-432*

268-196 **Vagshal', D. S.** Opyt geofizicheskikh issledovaniya na Bakal'skikh zhelezorudnykh mestorozhdeniyakh [Attempt at geophysical investigations on the Bakal' iron ore deposits]: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik no. 5, p. 61-66, illus., 1967.

268-196 **Vagshal', D. S.** Opyt geofizicheskikh issledovaniya na Bakal'skikh zhelezorudnykh mestorozhdeniyakh [Attempt at geophysical investigations on the Bakal' iro ore deposits]: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sborni no. 5, p. 61-66, illus., 1967.

273-013 **Vail, J. R.; Snelling, N. J.; Rex, D. C.** Pre-Katangan geochronology of Zambi and adjacent parts of Central Africa, *in* Geochronology of Precambrian stratifie rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci v. 5, no. 3, pt. 2, p. 621-628, illus., tables, 1968.

268-150 **Vaišnys, J. Rimas.** Propagation of acoustic waves through a system undergoin phase transformations: Jour. Geophys. Research, v. 73, no. 24, p. 7675-7683, 1968.

273-039 **Vâjdea, Eleonora.** Contribuţii privind datarea unor galene din Republica Sc cialistă România pe baza determinării composiţiei lor izotopice [Contributions t the dating of some galenas in Rumania by their isotopic composition (with Englis and French abs.)]: România Com. Geol. Dări de Seamă Sed., v. 53 (1965-66), n 3, p. 397-410, illus., tables, 1968.

273-184 **Vâjdea, V.** Cercetări geoelectrice pe modele reduse cu ajutorul metodelor polarizatiei provocate şi rezistivităţilor [Geoelectrical research on models by means of the induced polarization and resistivity methods (with English and French abs.)]: România Com. Geol. Dări de Seamă Şed., v. 53 (1965-66), no. 3, p. 429-443, illus., table, 1968.

Vakhnin, V. M. See *Cherkasov, I. I. 268-100*

267-242 **Vakhromeyev, I. S.** O prirode pryamolineynykh kontaktov magmaticheskikh kompleksov v zelenokamennykh porodakh Magnitogorskogo sinklinoriya [On the nature of the straight contacts of the magmatic complexes in the greenstone rocks of the Magnitogorsk synclinorium], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 359-361, 1968.

264-152 **Vakhtanova, A. N.; Esenov, E. M.; Ostasheva, V. N.** Seysmicheskoye mikrorayonirovaniye territorii Krasnovodska [Seismic microzoning of the Krasnovodsk territory]: Akad. Nauk Turkmen. SSR Izv. Ser. Fiz.-Tekh., Khim. i Geol. Nauk, no. 6, p. 65-72, illus., tables, 1967.

265-601 **Vakhtin, B. S.; Filippov, Ye. M.** Vozmozhnosti primeneniya neytronnoy spektrometrii v yadernoy geofizike [Possibilities of using neutron spectrometry in nuclear geophysics]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 101-108, illus., table, 1968.

Vaks, Z. M. See *Meshbey, V. I. 270-387*

274-198 **Vakul'skiy, A. A.; Fedchishin, A. S.** Perekhodnyy protsess v induktsionnom magnitopriyemniki pri impul'snom vozdeystvii previchnogo polya [The transient process in a magnetic induction pickup in the case of pulse action of the primary field], *in* Teoriya i elementy sistem otbora geofizicheskoy informatsii: Kiev, Akad. Nauk Ukrain. SSR, p. 69-73, illus., 1965.

265-021 **Valastro, S., Jr.; Davis, E. Mott; Rightmire, Craig T.** University of Texas at Austin radiocarbon dates VI: Radiocarbon, v. 10, no. 2, p. 384-401, table, 1968.

Valdes, Sylvia. See *Lidz, Louis. 273-489*

269-332 **Vale, K. R.** Progress of the reconnaissance gravity survey of Australia, *in* ECAFE Symposium, 3d, on Development of Petroleum Resources of Asia and the Far East, Tokyo, Japan, 1965, Proc., V. 1: UN ECAFE Mineral Resources Devel. Series, no. 26, p. 441-455, illus., table, 1967.

Válek, Rostislav. See *Sayyab, Abdullah. 268-267*

275-003 **Valentine, James W.; Veeh, H. Herbert.** Radiometric ages of Pleistocene terraces from San Nicolas Island, California: Geol. Soc. America Bull., v. 80, no. 7, p. 1415-1418, table, 1969.

265-287 **Vali, V.; Bostrom, R. C.** Some earth strain observations with a thousand meter laser interferometer: Earth and Planetary Sci. Letters, v. 4, no. 6, p. 436-438, illus., 1968.

266-257 **Vali, V.; Krogstad, R. S.; Moss, R. W.; Engel, Rene.** Some observations of strains across the Kern River fault using laser interferometer: Jour. Geophys. Research, v. 73, no. 18, p. 6143-6147, illus., 1968.

Vali, V. See *Bostrom, R. C. 268-118*

Vali, V. See *Bostrom, R. C. 269-609*

271-191 **Vali, V.; Bostrom, R. C.** The use of a laser extensometer to observe strain in a large ground sample: Bull. Geod., no. 88, p. 151-157, illus., 1968.

265-293 **Valle, P. E.** Il teorema del viriale e l'equilibrio di un sistema autogravitante isolato [The virial theorem and the equilibrium of an isolated self-gravitating system (with English summ.)]: Annali Geofisica, v. 19, no. 3, p. 360-364, 1966.

273-290 **Valliant, H. D.** The effect of humidity on the length of invariable pendulums: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 327-332, illus., 1969.

Valliappan, S. See *Zienkiewicz, O. C. 266-545*

Valuyeva, G. Ye. See *Pudovkin, I. M. 269-416, 271-351, 273-365*

270-517 **Valuyskiy, A. A.; Muratov, A. A.; Pankov, Yu. L.; Tkachev, Ye. V.** Opyt primeneniya poluavtomaticheskogo preobrazovatelya karotazhnykh diagramm v geologicheskikh usloviyakh Krasnodarskogo kraya [Attempt to use a semiautomatic logging diagram converter in the geologic conditions of the Krasnodar Territory]: Razved. Geofizika, no. 29, p. 113-116, tables, 1968.

Valyayev, B. M. See *Kropotkin, P. N. 269-471*

266-193 **Valyus, V. P.** Opredeleniye seysmicheskikh razrezov po sobokupnosti nablyudeniy [Determination of seismic sections from a set of observations], *in* Nekotoryye pryamyye i obratnyye zadachi seysmologii: Akad. Nauk SSSR Inst. Fiziki Zemli, Vychislitel'naya Seysmologiya, no. 4, p. 3-14, illus., 1968.

268-375 **VanAllen, J. A.; Ness, Norman F.** Particle shadowing by the Moon: Jour. Geophys. Research, v. 74, no. 1, p. 71-93, illus., tables, 1969.

273-346 **VanAllen, J. A.; Wende, C. D.** The solar flare of July 8, 1968: Jour. Geophys. Research, v. 74, no. 11, p. 3046-3048, illus., 1969.

VanAndel, S. I. See *Hospers, J. 271-366*

271-367 **VanAndel, S. I.; Hospers, J.** A statistical analysis of ancient Earth radii calculated from palaeomagnetic data: Tectonophysics, v. 6, no. 6, p. 491-497, illus., tables, 1968.

272-515 **vanAndel, Tjeerd H.; Phillips, Joseph D.; VonHerzen, R. P.** Rifting origin for the Vema fracture in the North Atlantic: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 296-300, illus., 1969.

vanAndel, Tjeerd H. See *Melson, W. G. 268-603*

272-521 **vanAndel, Tjeerd H.; Veevers, J. J.** Morphology and sediments of the Timor Sea: Australia Bur. Mineral Resources, Geology and Geophysics Bull., no. 83, 173 p., illus., tables, 1967.

VANBeek, G. Jansen. See *Loomer, E. I. 273-351*

272-498 **Vancea, A.** Le rôle du sel dans la formation des dômes de la cuvette de Transylvanie [The role of salt in the formation of domes of the Transylvanian basin]: Rev. Roumaine Géologie, Géophysique et Géographie, Sér. Géologie, v. 12, no. 2, p. 203-217, illus., 1968.

264-375 **Van-Chi, Fam; Yanovskiy, B. M.; Kovtun, A. A.; Raspopov, O. M.; Troitskaya, V. A.; Schlich, R.** Investigation of type Pc3 geomagnetic pulsations at magnetically-conjugate points: Geomagnetism and Aeronomy, v. 8, no. 1, p. 94-97, illus., 1968.

264-323 **Vancour, Roger P.; Sellers, Bach; Hanser, Frederick A.** Rocket measurements of electron and proton intensities in a magnetic disturbance: Jour. Geophys. Research, v. 73, no. 15, p. 4979-4985, illus., tables, 1968.

266-380 **vandeLindt, W. J.** Reply [to criticism by Richard J. O'Connell of "Movement of the Mohorovicic discontinuity under isostatic conditions" (1967)]: Jour. Geophys. Research, v. 73, no. 20, p. 6607, illus., 1968.

269-438 **VanderVoo, R.** Comments on "Paleomagnetism of the Lisbon volcanics" by N. D. Watkins and A. Richardson [1968]: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 543-547, illus., table, 1968.

270-273 **vanderVoo, R.** Jurassic, Cretaceous and Eocene pole positions from northeastern Turkey: Tectonophysics, v. 6, no. 3, p. 251-269, illus., tables, 1968.

274-361 **VanderVoo, R.** Paleomagnetic evidence for the rotation of the Iberian Peninsula: Tectonophysics, v. 7, no. 1, p. 5-56, illus., tables, 1969.

274-294 **vanDonk, Jan; Mathieu, Guy.** Oxygen isotope compositions of foraminifera and water samples from the Arctic Ocean: Jour. Geophys. Research, v. 74, no. 13, p. 3396-3407, illus., tables, 1969.

268-088 **VanDorn, W. G.** Tsunamis on the Moon,: Nature, v. 220, no. 5172, p. 1102-1107, illus., tables, 1968.

Vaněk, Jiří. See *Pros, Zdenek. 274-158*

VanLoenen, R. E. See *Lee, Donald E. 269-009*

264-008 **vanNiekerk, C. B.; Burger, A. J.** Pb-isotope dating of the Zoetlief System South Africa: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 211-218, illus., table, 1968.

271-028 **vanNiekerk, C. B.; Burger, A. J.** The uranium-lead isotopic dating of South African acid lavas: Bull. Volcanol., v. 32, no. 3, p. 481-498, illus., 1969.

267-400 **VanSabben, D.** Solar flare effects and simultaneous magnetic daily variation, 1959-61: Jour. Atmos. and Terrest. Physics, v. 30, no. 9, p. 1641-1648, illus., table, 1968.

271-343 **vanSabben, D.** The computation of magnetospheric currents, caused by dynamo action in the ionosphere: Jour. Atmos. and Terrest. Physics, v. 31, no. 3, p. 469-474, 1969.

270-029 **VanSchmus, W. R.; Ribbe, P. H.** The composition and structural state of feldspar from chondritic meteorites: Geochim. et Cosmochim. Acta, v. 32, no. 12, p. 1327-1342, illus., tables, 1968.

274-036 **VanSchmus, W. R.; Ribbe, P. H.** Composition of phosphate minerals in oridinary chondrites: Geochim. et Cosmochim. Acta, v. 33, no. 5, p. 637-640, tables, 1969.

Vantsyan, G. M. See *Badalyan, S. V. 264-193*

264-187 **Van'yan, L. L.; Lyapishev, A. M.; Marderfel'd, B. Ye.** Zavisimost' peremennogo elektromagnitnogo polya v more ot parametrov geoelektricheskogo razreze [Dependence of the alternation electromagnetic field in the sea on the parameters of the geoelectric section]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 109-111, illus., 1968.

264-378 **Van'yan, L. L.; Dmitriyev, V. I.; Belen'kaya, B. N.** Propagation of geomagnetic disturbances in an unevenly magnetized cold plasma: Geomagnetism and Aeronomy, v. 8, no. 1, p. 126-127, illus., 1968.

266-239 **Van'yan, L. L.; Kharin, Ye. P.** Glubinnyye magnito-variatsionnyye zondirovaniya v Pribaykal'ye [Deep magnetovariational sounding in Pribaikalia, *in* Regional'nyye geofizicheskiye issledovaniya v Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii i Geofiziki, p. 184-193, illus., tables, 1967.

268-188 **Van'yan, L. L.; Yudin, M. N.** Ob odnom sposobe obrabotki ostsillogramm stanovleniya elektromagnitnogo polya [On a method of processing oscillograms of the electromagnetic field buildup]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved. , no. & , p. 119-124, illus., 1968.

271-348 **Van'yan, L. L.; Marderfel'd, B. Ye.; Kuyezov, I. K.** Anomaly in geomagnetic variations in the Far East: Geomagnetism and Aeronomy, v. 8, no. 4, p. 574-578, illus., tables, 1968.

272-169 **Van'yan, L. L.** Electromagnetic sounding by a transient method [with French and Russian abs.]: Annales Géophysique, v. 24, no. 4, p. 915-922, illus., 1968.

272-177 **Van'yan, L. L.** Formation of an electromagnetic field and its use for solving problems in structural geology [*translation of* Stanovleniye elektromagnitnogo polya i yego ispol'zovaniye dlya resheniya zadach strukturnoy geologii: Novosibirsk. Izdatel'stvo "Nauka," 103 p., 1966]: Springfield, Va., Clearinghouse for Federal Sci. and Tech. Inf. (U.S. Joint Pub. Research Service, JPRS 44,637), 130 p., illus., tables, 1968.

275-151 **Van'yan, L. L.; Terekhin, Ye. N.** Osobennosti chastotnykh elektromagnitnykh zondirovaniy nad razrezami tipa A [Features of electromagnetic frequency sounding over type A sections]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 79-80, illus., 1969.

275-164 **Van'yan, L. L.; Tuyezov, I. K.; Marderfel'd, B. Ye.** Anomaliya geomagnitnykh variatsiy v dal'nevostochnom sektore Tikhookeanskogo kol'tsa i yeye vozmozhnaya svyaz' s geotermicheskim rezhimom [Anomalies of geomagnetic variations in the Far Eastern sector of the Pacific Ocean rim and its possible relation to the geothermal regime (with English summ., p. 150)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 85-92, illus., table, 1969.

275-141 **vanZijl, J. S. V.** A deep Schlumberger sounding to investigate the electrical structure of the crust and upper mantle in South Africa: Geophysics, v. 34, no. 3, p. 450-462, illus., table, 1969.

265-308 **Vardanyants, L. A.** K istorii zemnoy kory [On the history of the Earth's crust]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 20, nos. 1-2, p. 13-20, tables, 1967.

275-139 **Varderesyan, G. V.** Issledovaniya napryazheniy v ob''yemnykh modelyakh metodom fotouprugosti [Investigations of stresses in three-dimensional models by the method of photoelasticity]: Akad. Nauk Armyan. SSR Izv. Nauki o Zemle, v. 19, nos. 1-2, p. 139-146, illus., tables, 1966.

270-381 **Varga, Ede; Zilahi-Sebess, László.** Szeizmikus információk feldolgazása az OKGT Szeizmikus Kutatási Uzemben és az E. L. Geofizikai Intézetben [Processing of seismic information in the OKGT Seismic Research Plant and in the Roland Eötvös Geophysical Institute (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 147-151, 1968.

270-200 **Varkovetskiy, M. B.; Ivanov, I. A.** K voprosu o proyavlenii sovremennykh tektonicheskikh dvizheniy v doline r. Yeniseya v Zapadnom Sayane [On the problem of manifestations of recent tectonic movements in the Yenisei River valley in West Sayan]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 9, p. 131-134, illus., 1968.

271-242 **Varlamov, I. P.** Mezozoyskaya i kaynozoyskaya tektonika Yuzhnogo Urala i Priural'ya [Mesozoic and Cenozoic tectonics of the southern Urals and the region near the Urals], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 146-150, 1968.

265-069 **Varshavskaya, E. S.** Metody opredeleniya rubidiya i radiogennogo strontsiya v porodakh i mineralakh [Methods of determining rubidium and radiogenic strontium in rocks and minerals], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 147-155, 1967.

Varshavskaya, E. S. See *Gerling, E. K. 267-039*

269-639 **Vartanov, S. P.; Velikov, E. Kh.; Nikolayeva, Ye. Ya.** Primeneniye na more perekryvayushchikhsya grupp seysmopriyemnikov [Use at sea of overlapping groups of geophones]: Razved. Geofizika, no. 26, p. 24-28, illus., 1968.

Vartazaryan, Zh. S. See *Melikyan, L. S. 265-053*

Vartazov, S. Ya. See *Alekseyev, F. A. 272-481*

267-568 **Varyushchenko, S. B.; Kulichenko, L. N.** Poluprovodnikovyye detektory elektronov [Semiconducting electron detectors]: Geofiz. Apparatura, no. 34, p. 128-132, illus., 1967.

Vashchilov, J. J. See *Fedynskiy, V. V. 269-284*

264-431 **Vashchilov, Yu. Ya.** Sposob rascheta glubiny nizhnego ogranizheniya namagnichennykh mass [A way of calculating the depth of the lower boundary of magnetized masses]: Moskov. Univ. Vestnik, ser. 4, no. 2, p. 105-108, 1968.

270-217 **Vashchilov, Yu. Ya.; Gaynanov, A. G.** Novyye dannyye o plotnostnykh neodnorodnostyakh zemnoy kory i verkhney mantii [New data on the density inhomogeneities of the Earth's crust and upper mantle]: Akad. Nauk SSSR Doklady, v. 183, no. 3, p. 661-663, illus., 1968.

273-221 **Vashchilov, Yu. Ya.; Volodarskiy, R. F.; Litvinenko, O. K.; Ushakov, S. A.; Fedynskiy, V. V.** Primeneniye matematicheskikh metodov pri interpretatsii rezul'tatov regional'nykh geofizicheskikh issledovaniy [Use of mathematical methods in interpretation of the results of regional geophysical investigations], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 13, Matematicheskiye metody v geologii: Moscow, Izdatel'stvo "Nauka," p. 75, 1968.

264-505 **Vasilenko, N. N.; Igumnov, V. M.** Ratsional'naya skhema ERU i smesitelya stantsii PSL-3 [A feasible ERU starter scheme and the mixer of the PSL-3 station]: Razved. Geofizika, no. 23, p. 33-35, illus., 1967.

273-314 **Vasilenko, V. B.; Sotnikov, V. I.; Nikitina, Ye. I.; Kholodova, L. D.** O vozmozhnosti ispol'zovaniya lyuminestsentsii apatitov v geologicheskoy termometrii [On the possibility of using the luminescence of apatite in geologic thermometry (with English summ. p. 158)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 11, p. 131-135, illus., tables, 1968.

Vasilenko, Ye. M. See *Kostyuk, O. P. 265-164*

266-160 **Vasilenko, Ye. M.** Vysokochastotnyye mikroseysmy gorodov zapadnykh oblastey Ukrainy i vozmozhnost' ikh ispol'zovaniya dlya seysmicheskogo rayonirovaniya [High-frequency microseisms in the cities of the western regions of the Ukraine and possibility of utilizing them for seismic zoning (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 86-90, illus., 1967.

270-148 **Vasil'yev, P. I.; Savin, A. P.** Sravitel'naya otsenka sposobov izmereniya v aeroelektrorazvedke metodom zazemlennogo kabelya [Comparative assessment of methods of measurement in airborne electrical surveying by the grounded cable method]: Geofiz. Apparatura, v. 36, p. 71-80, illus., tables, 1968.

270-533 **Vasil'yev, V. G.** Odnomernaya obratnaya zadacha induktsionnogo karotazha [The one-dimensional inverse problem of induction logging], *in* Nekotoryye metody i algoritmy interpretatsii geofizicheskikh dannykh: Moscow, Akad. Nauk SSSR Sibirskoye Otdeleniye, Vychislitel'nyy Tsentr (Izdatel'stvo "Nauka,"), p. 105-114, illus., tables, 1967.

Vasil'yev, Yu. A. See *Raykher, L. D. 266-525*

273-145 **Vasil'yev, Yu. I.; Ivanova, L. A.; Shcherbo, M. N.** Izmereniye napryazheniy i deformatsiy v grunte pri rasprostranenii vzryvnykh voln [Measurement of stresses and deformations in the ground upon propagation of explosive waves]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 21-37, illus., 1969.

Vasil'yev, Yu. M. See *Arabadzh, M. S. 264-265*

269-355 **Vasil'yev, Yu. M.; D'yakonov, D. I.; Charygin, M. M.** Geotermiya glubinnykh nedr Prikaspiyskoy vpadiny po dannym bureniya Aralsorskoy sverkhglubokoy skvazhiny [Geothermy of the depths of the Caspian basin according to drilling data of the Aralsorsk ultradeep borehole (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 55-61, illus., 1968.

275-254 **Vasil'yeva, I. L.; Otamn, N. S.** Termal'nyye vody al'bskogo vodonosnogo kompleksa Yuzhno-Mangyshlakskogo progiba [Thermal waters of the Albian water-bearing complex of the South Mangyshlak depression]: Sovetskaya Geologiya, no. 2, p. 153-156, illus., table, 1969.

264-581 **Vasin, V. S.; Galkina, E. B.; Grishayev, A. I.** Malogabaritnyy impul'snyy istochnik neytronov dlya skvazhinnogo generatora [Miniaturized pulsed neutron source for a borehole generator]: Geofiz. Apparatura, no. 33, p. 126-129, illus., 1967.

Vasserman, T. M. See *Telegin, A. N. 264-508*

272-184 **Vatlin, B. P.** O formulakh chislennogo integrirovaniya dlya resheniya nekotorykh zadach geofiziki [On formulas of numerical integration for the solution of some problems of geophysics]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 10, p. 111-117, table, 1968.

Vaughan, Otha H., Jr. See *Lou, Y. S. 275-053*

269-703 **Vayntsvayg, M. N.; Guberman, Sh. A.; Churinova, I. M.** Obucheniye mashiny raspoznavaniyu heftenosnykh plastov v zalezhakh massivnogo tipa [Instructing the computer to discern oil-bearing formations in pools of massive type]: Neftegazovaya Geologiya i Geofizika, no. 8, p. 39-42, illus., 1968.

264-507 **Vaypolin, Yu. V.** O stratigraficheskoye privyazke otrazhayushchikh gorizontov [On the stratigraphic correlation of reflecting horizons]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 89-96, illus., table, 1968.

Vdovykin, G. P. See *Vinogradov, A. P. 272-065*

272-067 **Vdovykin, G. P.** XIII Meteoritnaya konferentsiya [The 13th Meteorite Conference]: Geokhimiya, no. 9, p. 1141-1142, 1968.

266-282 **Vedder, John G.; Brown, Robert D., Jr.** Structural and stratigraphic relations along the Nacimiento fault in the southern Santa Lucia Range Range and San Rafael Mountains, California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 242-258, illus., table; discussion, p. 258-259, 1968.

267-639 **Vedekhin, A. F.; Pavlov, Yu. P.; Trufanov, V. V.** Primeneniye monokristalla NaJ(Tl) s otrazhatelem iz Li^{6}F dlya registratsii gamma-izlucheniya [Use of single crystals of NaI(Tl) with Li^{6}F reflector for recording gamma radiation]: Geofiz. Apparatura, no. 34, p. 143-148, illus., table, 1967.

270-521 **Vedekhin, A. F.; Balugina, N. M.; Pavlov, Yu. P.** Primeneniye plastin NaJ(Tl) v schetchikakh, registriruyushchikh γ-izlucheniye v rezhime plato [Use of NaI(Tl) tablets in counters recording γ-radiation in the plateau regime]: Geofiz. Apparatura, no. 35, p. 65-69, illus., table, 1968.

271-570 **Vedekhin, A. F.; Semenov, Ye. V.** O nekotorykh prichinakh, vliyayushchikh na kharakteristike stsintillyatsionnykh schetnikov trekhkanal'noy apparatury radioak-

tivnogo karotazha [On some causes affecting the characteristics of scintillation counters of three-channel radioactivity logging apparatus]: Geofiz. Apparatura, no. 31, p. 104-109, illus., 1967.

272-565 **Vedekhin, A. F.; Gutorov, Yu. A.; Kuchernyuk, V. D.** Izucheniye vozmozhnosti ispol'zovaniya kristallov NaJ(Tl) v termostoykoy skvazhinnoy apparature RK [Study of the possibility of using NaI(Tl) crystals in heat-resistant borehole apparatus of radioactivity logging], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 209-215, illus., tables, 1968.

Veeh, H. Herbert. See *Valentine, James W. 275-003*

Veevers, J. J. See *vanAndel, Tjeerd H. 272-521*

271-152 **Véges, István.** Izo-térkép szerkesztése rendszertelen pontokban mért adatokbol [Construction of contour maps from the data of measurements at randomly distributed points (with Russian and German summ.)]: Magyar Geofizika, v. 9, nos. 4-5, p. 182-193, illus., 1968.

Vegos, Charles J. See *Trask, Donald W. 266-313*

271-169 **Veis, G.** The determination of the radius of the Earth and other geodetic parameters as derived from optical satellite data: Bull. Geod., no. 89, p. 253-275, illus., tables, 1968.

Velichko, B. K. See *Gerus, E. A. 273-040*

Velikin, A. B. See *Bulgakov, Yu. I. 265-254*

265-247 **Velikov, E. Kh.; Golubov, B. N.; Nikolayeva, Ye. Ya.** Geologicheskaya interpretatsiya novykh dannykh seysmorazvedki i elektrorazvedki na morskom prodolzhenii Mangyshlaka [Geologic interpretation of new seismic and electrical survey data in the offshore continuation of Mangyshlak]: Neftegazovaya Geologiya i Geofizika, no. 5, p. 37-40, illus., 1968.

Velikov, E. Kh. See *Vartanov, S. P. 269-639*

273-509 **Vendel'shteyn, B. Yu.** Issledovaniye razrezov neftyanykh i gazovykh skvazhin metodom sobstvennykh potentsialov [Investigation of oil and gas well sections by the self-potential method]: Moscow, Izdatel'stvo "Nedra," 206 p., illus., tables, 1966.

Venedikov, A. See *Melchior, P. 269-214*

265-597 **Venkata Reddy, K.; Babu, V. R. R. M.; Rau, R. V. R.** Radioactivity from gamma count: Geol. Soc. India Bull., v. 5, no. 2, p. 50-52, table, 1968.

275-008 **Venkatasubramanian, V. S.; Gopalan, K.; Iyer, S. S.; Pal, S.; Krishnan, R. S.** Studies on the Rb-Sr and K-Ar dating of minerals from the Precambrian of India, *in* Geochronology of Precambrian stratified rocks—Internat. Conf., Edmonton, Alberta, 1967, Papers: Canadian Jour. Earth Sci., v. 5, no. 3, pt. 2, p. 601-603, illus., table, 1968.

Verbeek, A. A. See *Schreiner, G. D. L. 269-016*

273-484 **Verdeyen, J.** Principes et applications de la mécanique des roches [Principles and application of rock mechanics]: Acad. Royale Sci. Outre-Mer Bull. Séances 1967, no. 6, p. 1180-1209, illus., 1968.

Verdurmen, E. A. Th. See *Priem, H. N. A. 266-030*

Verdurmen, E. A. Th. See *Priem, H. N. A. 269-012*

274-349 **Vereshchagin, Yu. P.** O kharaktere vozmushchennosti magnitnogo polya Zemli v rayone stantsii Novolazarevskoy v 1964 g. [On the character of the disturbance of the magnetic field of the Earth in the vicinity of the Novolazarevskaya station in 1964]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 55, p. 40-41, illus., 1965.

270-348 **Veretennikov, G. V.** Ob ispol'zovaniy poluprovodnikovykh detektorov yadernykh izlucheniy v geofizicheskom priborostroyenii [On the use of semiconducting detectors of nuclear radiation in geophysical instrument construction]: Geofiz. Apparatura, no. 35, p. 75-83, illus., 1968.

274-065 **Verguèse, Dominique.** La planète Vénus d'après les mesures transmises par Vénus-4 et Mariner-5 [The planet Venus from measurements transmitted by Venus-4 and Mariner-5]: Sci. Progrès – La Nature, no. 3402, p. 361-370, illus., 1968.

269-061 **Verhagen, B. Th.** Rapid isotope enrichment of gases by thermal diffusion for nuclear dating, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 657-672, illus., tables, 1967.

264-161 **Verma, R. K.** Elasticity of olivine and garnets and their relationship to velocities in ultrabasic rocks, *in* Problems in geophysics relating to the crust of the Earth—Indian Natl. Comm. Geodesy and Geophysics, Geophys. Research Board Symposium 1964, Hyderabad, India, Proc.: Hyderabad, India, Natl. Geophys. Research Inst., p. 155-162, illus., tables, 1966.

Verma, R. K. See *Narain, Hari. 265-353*

268-294 **Verma, R. K.; Narain, Hari.** Terrestrial heat flow in India, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 22-34, illus., tables, 1968.

268-392 **Verma, R. K.; Narain, Hari.** Paleomagnetic studies of Indian rocks and continental drift, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 189-197, illus., tables, 1968.

273-383 **Verma, R. K.; Pullaiah, G.; Hasnain, Iqbal.** Paleomagnetic study of a dyke near Hyderabad, India: [India] Natl. Geophys. Research Inst. Bull., v. 6, no. 2, p. 79-86, illus., 1968.

Vernon, M. J. See *Bofinger, V. M. 264-018*

267-405 **Verö, J.** Sur la possibilité d'une corrélation entre des pulsations magnétiques du type pc avec des variations de plus longues périodes [On the possibility of a correlation between some magnetic pulsations of pc type with some variations of longer periods (with English abs.)]: Annales Géophysique, v. 23, no. 4, p. 581-584, illus., 1967.

Vero, Jozsef. See *Kiraly, Erno. 265-240*

265-246 **Verö, József.** Metodika i nekotoryye rezul'taly obrabotki bystrykh zapisey telluricheskikh tokov v observatorii Nad'senk [Procedure and some results of processing rapid-run records of earth currents at the Nagycenk Observatory]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 93-97, illus., table, 1968.

Verö, József. See *Adam, Antal. 270-138*

Verö, József. See *Adam, Antal. 272-172*

Verö, József. See *Tarczy-Hornoch, Antal. 274-182*

Verö, József. See *Hollo, Lajos. 274-187*

Verö, József. See *Király, Erno. 265-240*

Verschure, R. H. See *Priem, H. N. A. 266-030*

Verschure, R. H. See *Priem, H. N. A. 269-012*

Verschure, R. H. See *Priem, H. N. A. 270-015*

269-473 **Verzhbitskiy, Ye. V.; Isayev, Ye. N.; Shreyner, A. A.** Svyza' magnitnoy neodnorodnosti so stroyeniyem dna severo-zapadnoy chasti Indiyskogo okeana [Relationship of magnetic inhomogeneity to bottom structure of the northwestern part of the Indian Ocean (with English summ.)]: Okeanologiya, v. 8, no. 6, p. 1025-1035, illus., 1968.

Vesanen, E. See *Teisseyre, R. 265-134*

Veselov, K. Ye. See *Berezhnaya, L. T. 264-266*

Veselov, K. Ye. See *Bobrov, Yu. V. 264-267*

271-272 **Veselov, K. Ye.; Smirnov, L. P.; Bagramyants, V. O.** Offshore gravity measurements from small ships (100 to 400 tons): Bull. Geod., no. 88, p. 183-185, illus., 1968.

271-273 **Veselov, K. Ye.** New principles of measuring of gravity field elements on a mobile base: Bull. Geod., no. 88, p. 187-189, illus., 1968.

Vesely, Ivan. See *Cermak, Vladimir. 270-228*

275-132 **VESIAC Staff.** (éditors). GNOME seismogram album—VESIAC Spec. Rept. 4410-41-X: Ann Arbor, Mich., Univ. Michigan Inst. Sci. and Technology, Acoustics and Seismic Lab., 135 p., illus., 1962.

264-333 **Vestine, E. H.; Kahle, Anne B.** The westward drift and geomagnetic secular change: Royal Astron. Soc. Geophys. Jour., v. 15, nos. 1-2, p. 29-37, illus., table, 1968.

Vestine, E. H. See *Ball, R. H. 275-257*

Vetrov, A. G. See *Smirnov, G. S. 269-592*

Veysov, A. B. See *Aramirzoyev, R. A. 265-167*

Veysov, A. B. See *Agamirozoyev, R. A. 268-148*

268-342 **Veytsman, P. S.** Stroyeniye kory i verkhney chasti mantii Zemli po geofizicheskim dannym [Structure of the crust and upper part of the mantle of the Earth from geophysical data]: Itogi Nauki, Ser. Geofizika, 1966, p. 284-343, 1968.

Vialette, Yves. See *Blanc, Yves. 269-019*

266-316 **Vicente, R. O.** The detection of changes in the coordinates of a place on the Earth [with French abs.], *in* Continental drift, secular motion of the pole, and rotation of the earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht, Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 100, 1968.

Vickers, J. M. F. See *Lucas, J. W. 275-074*

Vidal, H. See *Fortsch, Otto. 273-286*

Viertl, J. R. M. See *Fleischer, R. L. 265-004*

Viertl, J. R. M. See *Fleischer, R. L. 273-007*

Vigneaux, M. See *Leveque, P. 271-513*

Vigneron, J. See *Keymenova, N. G. 269-410*

Vigneron, J. See *Troitskaya, V. A. 274-338*

Vigneron, Jacques. See *Tallineau, Yves. 274-323*

271-386 **Vijaya Raghava, M. S.** Analysis of vertical magnetic intensity profiles Kalawa (Rest House) area, Cuddapah Basin, (A. P.) India: Indian Geophys. Union Jour., v. 4, nos. 3-4, p. 203-210, illus., 1967.

264-196 **Vikhirev, B. V.; Zharzhevskaya, B. A.; Larina, V. A.; Mikhaylov, I. N.; Tarasov, E. O.** Primeneniya schetno-perforatsionnykh mashin pri obrabotke dannykh o fizicheskikh svoystvakh gornykh porod [Use of an analytical computer in processing data on the physical properties of rocks]: Prikladnaya Geofizika, no. 51, p. 101-114, tables, 1968.

264-197 **Vikhirev, B. V.** Metodika issledovaniya ryadov raspredeleniya plotnosti i drugikh fizicheskikh svoystv gornykh porod [A procedure for investigating series of density distributions and other physical properties of rocks]: Razved. Geofizika, no. 23, p. 51-59, illus., tables, 1967.

268-277 **Vikhirev, B. V.** Ispol'zovaniye rasseyaniya (dispersii) plotnosti gornykh porod v geofizike i geologii [Use of the scatter (dispersion) of density of rocks in geophysics and geology]: Prikladnaya Geofizika, no. 52, p. 134-138, table, 1968.

268-601 **Viktorov, A. M.** Predely prochnosti obraztsov gornykh porod pri szhatii po obrazuyushchey tsilindra [Limits of compressive strength of rock samples from test cylinders], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 216-218, illus., table, 1968.

264-182 **Vilenchik, A. M.; Golubkov, V. V.** Primeneniye MTZ v Prikaspiyskoy vpadine [Use of magnetotelluric sounding in the Caspian basin]: Razved. Geofizika, no. 23, p. 36-43, illus., 1967.

Vilesov, Ye. N. See *Zotikov, I. A. 273-288*

Vilesov, Ye N. See *Makarevich, K. G. 275-220*

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Vincent, Robert K. See *Hunt, Graham R. 266-068*

Vincent, Robert K. See *Hunt, Graham R. 273-095*

268-173 **Vincenz, S. A.** Resistivity investigations of limestone aquifers in Jamaica: Geophysics, v. 33, no. 6, p. 980-994, illus., table, 1968.

269-459 **Vine, F. J.** Magnetic anomalies associated with mid-ocean ridges, *in* The history of the Earth's crust, a symposium (Robert A. Phinney, editor)—Goddard Inst. Space Studies, 1966, Conf. Contr.: Princeton, N. J., Princeton Univ. Press, p. 73-89, illus., table, discussion, 1968.

274-231 **Vine, F. J.** Sea-floor spreading—New evidence: Jour. Geol. Education, v. 17, no 1, p. 6-16, illus., 1969.

268-220 **Vine, Frederick J.** Evidence from submarine geology, *in* Gondwanaland revisited—New evidence for continental drift: Am. Philos. Soc. Proc., v. 112, no. 5 p. 325-334, illus., 1968.

272-273 **Vinnik, L. N.; Dashkov, G. G.** Otrazheniya ot yadra pri atomnykh vzryvakh i problemy vnutrennego stroyeniya Zemli [Reflection from the core in atomic explosions and problems of the internal constitution of the Earth]: Akad. Nauk SSSR Doklady, v. 184, no. 6, p. 1327-1330, illus., tables, 1969.

265-159 **Vinnik, L. P.** Sposob povysheniya ustoychivosti vertikal'nykh mayatnikovykh seysmografov v dlinnykh periodakh [A method of enhancing the stability of vertical pendulum seismographs at long periods]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 81-85, illus., 1968.

267-565 **Vinnik, L. P.** Struktura mikroseysm i nekotoryye voprosy metodiki gruppirovaniya v seysmologii [The structure of microseisms and some problems of arrays in seismology]: Moscow, Izdatel'stvo "Nauka," 104 p., illus., table, 1968.

265-027 **Vinogradov, A. P.; Devirts, A. L.; Dobkina, E. I.; Markova, N. G.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Radiocarbon dating in the Vernadsky Institute IV: Radiocarbon, v. 10, no. 2, p. 451-453, 1968; originally published in Russian, 1963.

265-028 **Vinogradov, A. P.; Devirts, A. L.; Dobkina, E. I.; Markova, N. G.** Radiocarbon dates from Soviet laboratories, 1 January 1962-1 January 1966—Radiocarbon dating in the Vernadsky Institute V: Radiocarbon, v. 10, no. 2, p. 454-464, 1968; originally published in Russian, 1966.

266-391 **Vinogradov, A. P.** Gas regime of the Earth, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 1-19, tables, 1967; Russian text, Gazovyi reshim zemli, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

266-413 **Vinogradov, A. P.; Grinenko, V. A.** Causes for the considerable variation in the isotopic composition of sedimentary sulfides, *in* Chemistry of the Earth's crust, V. 2: Jerusalem, Israel Program for Scientific Translations, p. 621-629, illus., tables, 1967; Russian text, Prichina znachitel'noy dispersii izotopnogo sostava osadochnykh sul'fidov, *in* Khimiya zemnoy kory, V. 2: Moscow, Izdatel'stvo "Nauka," 1964.

267-373 **Vinogradov, A. P.; Devirts, A. L.; Dobkina, E. I.** Sovremennoye soderzhaniye tritiya v prirodnykh vodakh [Present tritium content in natural waters (with English summ.)]: Geokhimiya, no. 10, p. 1147-1162, illus., tables, 1968.

268-101 **Vinogradov, A. P.; Surkov, Yu. A.; Chernov, G. M.; Kirnozov, F. F.; Nazarkina, G. B.** Gamma investigation of the Moon and composition of the lunar rocks, *in* Moon and planets (Audouin Dollfus, editor)—[Pt.] 2, A session of the Joint Open Meeting of Working Groups I, II, and V, 10th Plenary Meeting, COSPAR, London, 1967: Amsterdam, North-Holland Publishing Co., p. 77-90, illus., 1968.

269-070 **Vinogradov, A. P.; Tugarinov, A. I.** Geochronological scale of the Precambrian, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 6, Geochemistry: Prague, Academia, p. 205-222, tables, 1968.

272-065 **Vinogradov, A. P.; Vdovykin, G. P.; Il'in, N. P.; Loseva, L. Ye.** Stroyeniye almazgrafitovykh srostkov v meteoritakh—ureilitakh v svyazi s ikh proiskhozhdeniyem [Structure of the diamond-graphite aggregates in ureilite meteorites in connection with their origin (with English summ.)]: Geokhimiya, no. 8, p. 891-905, illus., 1968.

Vinogradov, A. P. See *Semenenko, N. P. 273-020*

275-292 **Vinogradov, A. P.; Grinenko, V. A.** Prichina znachitel'noy dispersii izotopnogo sostava osadochnykh sul'fidov [The cause of the considerable dispersion of isotopic composition of sedimentary sulfides], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 2: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 581-588, illus., tables, 1964.

Vinogradov, P. A. See *Troitskaya, V. A. 271-349*

265-206 **Vinogradov, S. D.; Mirzoyev, K. M.** Gruppirovaniye uprugikh impul'sov pri razrushenii obraztsov iz neodnorodnykh materialov [Grouping of elastic pulses in the destruction of samples made of nonuniform materials]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 7, p. 41-49, illus., tables, 1968.

272-155 **Vinogradov, S. D.; Šimáně, Jindřich.** Rezul'taly akusticheskikh nablyudeniy shakhte "Anna" (Przhibram) [Results of acoustic observations in the "Anna" min (Pribram) (with English abs.)]: Československá Akad. Věd Studia Geophys. e Geod. v. 12, no. 4, p. 407-411, illus., tables, 1968.

265-376 **Vinogradov, V. I.; Zaritskiy, P. V.** Izotopnyy sostav sery baritovykh konkretsiy kiyevskom mergele Donbassa [Isotopic composition of the sulfur in the barit concretions in the Kiev marl of the Donets Basin]: Akad. Nauk SSSR Doklady, v 180, no. 2, p. 459-461, table, 1968.

Vinogradov, V. I. See *Chukhrov, F. V. 268-361*

272-284 **Vinogradov, V. I.; Shanin, L. L.** Zur Frage der Variationen de Schwefelisotopen-Zusammensetzung in den alten Ozeanen [On the problem of th sulfur isotopic composition in the old oceans]: Zeitschr. Angew. Geologie, v. 15, no 1, p. 33-36, table, 1969.

275-280 **Vinogradov, V. I.** Raspredeleniye izotopov sery v mineralakh rudnyk mestorozhdeniy [Distribution of sulfur isotopes in the minerals of ore deposits], *i* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SSSR Inst. Geolog Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (Izdatel'stvo Nauka p. 7-37, illus., tables, 1967.

Vinogradov, V. I. See *Shanin, L. L. 275-281*

Vinogradov, V. I. See *Chukhrov, F. V. 275-282*

Vinogradov, V. I. See *Shipulin, F. K. 275-283*

Vinogradov, V. I. See *Badalov, S. T. 275-284*

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Vinogradov, V. I. See *Shlyukova, Z. V. 275-286*

Vinogradov, V. I. See *Chebotarev, G. M. 275-287*

Vinogradov, V. I. See *Gavrikova, S. N. 275-288*

275-289 **Vinogradov, V. I.; Belyy, V. M.** Eksperimental'noye opredeleniye izotopno fraktsionirovaniya sery pri vysokotemperaturnom vosstanovlenii sul'fatov [Expe mental determination of isotopic fractionation of sulfur during high-temperatu reduction of sulfates], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Aka Nauk SSSR Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geo himii (Izdatel'stvo Nauka), p. 118-127, illus., table, 1967.

275-290 **Vinogradov, V. I.** Rol' sul'fatov v rudoobrazovanii [The role of sulfates in ore fo mation], *in* Izotopy sery i voprosy rudoobrazovaniya: Moscow, Akad. Nauk SS Inst. Geologii Rudnykh Mestorozhdeniy, Petrografii, Mineralogii i Geokhimii (datel'stvo Nauka), p. 128-153, illus., tables, 1967.

Vinogradov, V. N. See *Afanas'yev, Yu. V. 271-394*

Virág, Péter. See *Szabo, Janos. 270-508*

266-477 **Virina, Ye. I.; Geptner, A. R.; Pevzner, M. A.** O prirode namagnichennosti ign britov [On the nature of the magnetization of ignimbrites]: Akad. Nauk SS Doklady, v. 181, no. 1, p. 192-195, illus., 1968.

271-291 **Visarion, M.; Lazarescu, V.; Stefanescu, Ruxandra.** Lignes tectoniques majeu jalonees par des massifs de sel, reperees par des anomalies gravimetriques sur le ritoire de la Roumanie (I. Carpates orientales) [Major tectonic lines, marked out salt massifs, located by gravity anomalies in the territory of Rumania (eastern C pathians)]: Rev. Roumaine Géologie Géophysique et Géographie, Sér. G physique, v. 12, no. 2, p. 125-134, illus., 1968.

Visarion, M. See *Talos, D. 271-520*

Vishnyakov, Ye. P. See *Voyutskiy, V. S. 264-142*

270-140 **Višić, Stanislav.** Sadašnje stanje i mogućnosti primene geofizičkih metoda pri istraživanju bakra u Jugoslaviji [Present status and possibilities of application of geophysical methods in exploring for copper in Yugoslavia (with English summ.)]: Inst. Geol.-Rud. Istraživanja i Ispitivanja Nukearnih i Drugih Mineral. Sirovina, v. 4, p. 139-159, illus., 1968.

Visintini, G. de. See *Morelli, C. 267-119*

Viswasundara,Rao. See *Babu Rao, V. 264-174*

Vitkus, G. See *Lucas, J. W. 267-079*

268-081 **Vitkus, G.; Garipay, R. R.; Hagemeyer, W. A.; Lucas, J. W.; Jones, B. P.; Saari, J. M.** Lunar surface thermal characteristics, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 187-208, illus., 1968.

Vitozhents, G. Ch. See *Belov, V. I. 272-484*

Vitozhents, G. Ch. See *Berzin, A. K. 272-485*

Vitrik, S. P. See *Khizhnyakov, A. V. 265-277*

Vittozzi, P. See *Rapolla, Antonio. 270-012*

Vives E., Alberto. See *Monge E., Joaquin. 268-117*

269-228 **Vlaar, N. J.** Ray theory for an anisotropic inhomogeneous elastic medium: Seismol. Soc. America Bull., v. 58, no. 6, p. 2053-2072, 1968.

275-123 **Vlaar, N. J.** Rays and travel times in a spherical anisotropic Earth: Seismol. Soc. America Bull., v. 59, no. 3, p. 1051-1060, 1969.

273-190 **Vladimirov, N. P.; Dmitriyev, V. I.** O razreshayushchey sposobnosti magnitotelluricheskogo metoda v usloviyakh pyatisloynogo geoelektricheskogo razreza Pripyatskoy vpadiny [On the resolving power of the magnetotelluric method in the conditions of the five-layered geoelectrical section of the Pripyat basin]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 86-88, illus., table, 1969.

Vladimirov, V. M. See *Odintsov, M. M. 268-232*

270-221 **Vlasenkov, V. M.; Nemtsov, L. D.; Shaydenko, A. Ya.** Dinamicheskiy stend dlya ispytaniy gravimetricheskikh priborov [Dynamic stand for testing gravimetric instruments]: Geofiz. Apparatura, no. 36, p. 156-159, illus., 1968.

Vlasov, A. Ya. See *Zvegintsev, A. G. 274-368*

275-349 **Vlasov, V. P.; Klikshteyn, B. G.** Raschet poley namagnichennykh tel v forme tsilindricheskogo segmenta [Calculation of the fields of magnetic bodies in the shape of a cylindrical segment]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 5, p. 75-78, illus., 1969.

Vlasova, L. S. See *Brezgunov, V. S. 267-364*

Vlasova, L. S. See *Pinneker, Ye. V. 269-384*

Vlasova, S. P. See *Sukharev, G. M. 266-368*

Vlasova, S. P. See *Sukharev, G. M. 268-306*

271-274 **Vogel, A.** The qquestion of secular variations in the Earth's gravity field from mass displacements in the Earth's deep interior: Bull. Géod., no. 88, p. 223-226 1968.

272-060 **Vogel, Rudolf.** Zur Entstehung des Daubréelith im meteorischen Eisen [On the origin of the daubréelite in meteoritic iron (with English summ.)]: Neues Jahrb Mineralogie Monatsh., no. 12, p. 453-463, illus., 1968.

Vogt, Peter R. See *Morgan, W. Jason. 271-186*

271-248 **Vokhmyanina, Ye. I.** Proyavleniya neotektoniki v rel'yefe Prikam'ya i yeye svyaz s paleozoyskimi strukturami [Manifestations of neotectonics in the relief of the area near the Kama and its relationship to Paleozoic structures], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 179-184, illus., 1968.

265-264 **Volarovich, M. P.; Marmorshteyn, L. M.; Mekler, Yu. B.** Izmeneniye struktury porovogo prostranstva peschanikov pod davleniyem [Variation in the structure of the pore space of sandstones under pressure]: Akad. Nauk SSSR Izv. Fizika Zemli no. 6, p. 15-19, illus., 1968.

Volarovich, M. P. See *Afanas'yev, G. D. 268-156*

268-157 **Volarovich, M. P.** Issledovaniye uprugikh svoystv gornykh porod pri vysokikh davleniyakh v svyazi s izucheniyem zemnoy kory i verkhney mantii [Investigation o the elastic properties of rocks at high pressures in connection with the study of the Earth's crust and upper mantle], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 30-36, illus., 1968.

268-159 **Volarovich, M. P.; Bayuk, Ye. I.; Salekhli, T. M.; Pavlogradskiy, V. A.** Vliyaniya vsestoronnego davleniya na skorosti prodol'nykh voln v nasyshchennykh kerosinom vodoy obraztsakh osadochnykh porod [Effect of confining pressure on longitudina wave velocities in samples of sedimentary rocks saturated with kerosene and water] *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chast zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 123-127 illus., table, 1968.

268-160 **Volarovich, M. P.; Levykin, A. I.; Galdin, N. Ye.** Izucheniye skorostey prodol'nykh voln v obraztsakh gornykh porod pri davleniyakh do 20,000 kg/cm² [Study o longitudinal wave velocities in rock samples at pressures up to 20,000 kg per sq cm *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chas zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 127-13 illus., table, 1968.

268-161 **Volarovich, M. P.; Levykin, A. I.** Skorosti prodol'nykh voln v obraztsakh poro pri davleniyakh do 40,000 kg/cm² [Longitudinal wave velocities in rock samples pressures up to 40,000 kg per sq cm], *in* Simpozium po fiziko-mekhanicheski svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklad Moscow, Izdatel'stvo "Nauka," p. 130-133, illus., table, 1968.

268-183 **Volarovich, M. P.; Parkhomenko, E. I.; Sobolev, G. A.** Laboratorynyye i polevy issledovaniya p'yezoelektricheskogo effekta gornykh porod [Laboratory and field i vestigations of the piezoelectric effect in rocks], *in* Simpozium po fiziko-me hanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 196 Doklady: Moscow, Izdatel'stvo "Nauka," p. 181-184, illus., 1968.

268-322 **Volarovich, M. P.** Geophysical aspects of the problems of elastic and electric properties of rocks at pressures up to tens of kilobars, *in* The crust and upper man of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Uni Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 517-522, illus., 1968.

Volarovich, M. P. See *Alekseyev, F. A. 272-481*

Vol'fson, N. B. See *Fursov, V. A. 269-203*

273-463 **Volin, A. P.** Nomogramma dlya opredeleniya otnositel'nykh pogreshnostey pri graficheskom vychislenii skorostey v KMPV [Nomogram for the determination of relative error in graphic calculation of velocities in the refraction correlation method]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 3, p. 103-106, illus., table, 1968.

269-700 **Volkov, E. V.; Sarkisyan, I. S.; Yushinskaya, Z. N.** Pereryvy v osadkonakoplenii nizhnemelovykh nefteproduktivnykh tolshch Srednego Priob'ya i ikh znacheniye dlya poiskovykh rabot [Breaks in sedimentation of the Lower Cretaceous oil-producing series of the Central Ob region and their significance for prospecting operations]: Neftegazovaya Geologiya i Geofizika, no. 7, p. 10-15, illus., tables, 1968.

Vol' [illegible], Yu. A. See *Shavlo, S. G. 274-281*

V[illegible]ova, L. A. See *Zhirov, K. K. 272-039*

Volkova, L. F. See *Solov'yev, S. L. 265-174*

Volland, H. See *Mayr, H. G. 264-320*

266-458 **Vollstädt, H.** On the determination of rock-magnetic parameters by differential thermal analysis: Royal Astron. Soc. Geophys. Jour., v. 165, no. 1, p. 71-77, illus., tables, 1968.

268-408 **Vollstädt, Heiner; Frölich, Friedrich.** Studies on Curie-temperatures of rocks, *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 5, Geological results of applied geophysics: Prague, Academia, p. 9-15, illus., 1968.

Vollstadt, Heiner. See *Frolich, Friedrich. 274-363*

Vollstaedt, H. See *Frolich, F. 264-329*

Volodarskiy, R. F. See *Fedynskiy, V. V. 269-284*

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268-610 **Volovov, V. I.; Gulyayev, P. V.; Sechkin, V. A.** Novyye dannyye ob otrazhenii zvukha ot dna v Indiyskom okeane [New data on the reflection of sound from the bottom in the Indian Ocean (with English summ.)]: Okeanologiya, v. 8, no. 2, p. 235-244, illus., 1968.

Vol'vovskiy, I. S. See *Belyayevskiy, N. A. 264-302*

273-465 **Vol'vovskiy, I. S.; Davydova, N. I.; Radzhabov, M. M.** Ocherednyye zadachi glubinnogo seysmicheskogo zondirovaniya v SSSR (K itogi sovershchaniya Sektsii GSZ v Novosibirske) [Routine problems of deep seismic sounding in the U.S.S.R. (On the results of the conference of the DSS Section in Novosibirsk)]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 116-118, 1969.

Volvovsky, I. S. See *Beliayevsky, N. A. 265-354*

269-678 **VonDerBorch, C. C.** Southern Australian submarine canyons—Their distribution and ages: Marine Geology, v. 6, no. 4, p. 267-279, illus., 1968.

vonEller, Jean Paul. See *Leutwein, Friedrich. 274-016*

VonGonten, W. D. See *Osoba, J. S. 274-475*

266-091 **vonHake, Carl A.; Cloud, William K.** United States earthquakes, 1966: Washington, D. C., U.S. Coast and Geod. Survey, 110 p., illus., tables, 1968.

267-105 **vonHake, Carl A.; Cloud, William K.** United States earthquakes, 1964: Washington, D. C., U.S. Coast and Geod. Survey, 91 p., illus., 1966.

267-106 **vonHake, Carl A.; Cloud, William K.** United States earthquakes, 1965: Washington, D. C., U.S. Coast and Geod. Survey, 91 p., illus., tables, 1968.

VonHerzen, R. P. See *Andel, Tjeerd H. 272-515*

272-049 **VonMichaelis, H.; Willis, J. P.; Erlank, A. J.; Ahrens, L. H.** The composition o stony meteorites—[Pt.] 1, Analytical techniques: Earth and Planetary Sci. Letters, v 5, no. 6, p. 383-386, tables, 1969.

272-050 **VonMichaelis, H.; Ahrens, L. H.; Willis, J. P.** The composition of ston meteorites—[Pt.] 2, The analytical data and an assessment of their quality: Earth an Planetary Sci. Letters, v. 5, no. 6, p. 387-394, illus., tables, 1969.

VonMichaelis, H. See *Ahrens, L. H. 272-051*

VonRad, Ulrich. See *Rees, Anthony I. 267-436*

266-464 **Voo, R. van der.** Geology and paleomagnetism of an anticlinal structure in Lowe Triassic sediments near Atienza (Guadalajara, Spain): Geologie en Mijnbouw, v. 47 no. 3, p. 186-190, illus., 1968.

273-356 **Voppel, D.** Ein Spulentheodolit zur Messung der erdmagnetischer Komponente mit dem Protonenmagnetometer [A coil theodolite for the measurement of th geomagnetic components with the proton magnetometer (with English summ.) Zeitschr. Geophysik, v. 35, no. 2, p. 151-159, illus., tables, 1969.

Vorhis, Robert C. See *McGarr, Arthur. 264-091*

275-218 **Vorndran, Gerhard.** Untersuchungen zur Aktivitat der Gletscher—Dargestel an Beispielen aus der Silvrettagruppe [Investigations on the activity of glaciers—I lustrated by examples from the Silvretta group]: Kiel Univ. Geog. Inst. Schr., v. 2 no. 1, 129 p., illus., tables, 1968.

270-163 **Vorob'yev, A. A.; Yankevich, V. P.; Averkin, V. D.; Dalmatskaya, I. I.; Dobro hotova,** S. V. Dokungurskiy tektonicheskiy plan yugo-vostochnoy platformenn chasti Orenburgskoy oblasti [Pre-Kungurian tectonic plan of the southeastern pla form part of the Orenburg Region]: Geologiya Nefti i Gaza, no. 11, p. 19-22, illu 1968.

Vorob'yev, A. S. See *Blokh, I. M. 270-152*

264-148 **Vorob'yeva, Ye. A.; Solov'yev, S. L.** O sootnoshenii amplitud poverkhnostnyk prodol'nykh seysmicheskikh voln v zavisimosti ot glubiny ochaga zemletryaseni [On the relationship of amplitudes of surface and longitudinal seismic waves as function of depth of focus of the earthquake]: Akad. Nauk SSSR Sibirskoye O deleniye, Geologiya i Geofizika, no. 1, p. 103-110, illus., tables, 1968.

Vorodayevskaya, Z. V. See *Nikolayeva, I. V. 274-027*

Voronin, R. S. See *Solov'yev, S. L. 271-101*

268-570 **Voronin, Yu. A.** O postroyenii mery nepravil'nosti odnomernoy seti [On form lating a measure of the irregularity of a unidimensional network]: Akad. Nauk SSS Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 7, p. 63-66, illus., 1968.

273-219 **Voronin, Yu. A.** Ob analize razlichnykh formal'nykh protsedur diagnosa (rasp navaniya), ispol'zuyemykh dlya geologicheskoy interpretatsii geokhimicheskik geofizicheskikh dannykh [On the analysis of the different formal procedures of di noses (recognition) used for geologic interpretation of geochemical and geophysi data], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Pr 13, Matematicheskiye metody v geologii: Moscow, Izdatel'stvo "Nauka," p. 1968.

Voronina, E. V. See *Savarenskiy, Ye. F. 270-337*

Voronina, S. I. See *Solov'yev, S. L. 271-101*

Voronina, Ye. V. See *Savarenskiy, Ye. F. 274-409*

Vortman, M. Z. See *Mirchink, M. F. 269-278*

Vos, M. A. See *Robertson, P. B. 273-082*

269-105 **Voshage, H.** Cosmic-ray exposure ages and origin of iron meteorites, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 281-295, illus., tables, 1967.

271-230 **Voskresenskiy, S. S.** Odnovremennost' osnovnykh etapov razvitiya rel'yefa i neotektonicheskikh dvizheniy na territorii SSSR [Simultaneity of the main stages of development of the topography and neotectonic movements in the territory of the U.S.S.R.], *in* Problemy tektonicheskikh dvizheniy i noveyshikh struktur zemnoy kory (INQUA Cong., 8th, Paris 1969): Moscow, Izdatel'stvo "Nauka," p. 56-61, illus., 1968.

Voskresenskiy, Yu. N. See *Ryabinkin, L. A. 268-563*

Voskresenskiy, Yu. N. See *Urupov, A. K. 271-525*

Vosters, M. See *Hanappe, F. 265-077*

Vostretsov, R. N. See *Lebedkin, L. V. 264-580*

275-209 **Votakh, O. A.** Glavnyye tipy tektonicheskikh struktur osadochnoy obolochki kontinentov [Main types of tectonic structures of the sedimentary shell of the continents (with English summ., p. 146)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 2, p. 3-12, illus., table, 1969.

271-119 **Vovk, A. A.; Plaskiy, V. A.; Lebed', S. G.** Pro vplyv vlastyvostey vybukhovykh rechovyn na parametry vybukhovykh khvyl' u zv'yaznykh hruntakh [On the effect of the properties of the explosive material on the parameters of blast waves in compressible soils (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 10, p. 904-908, illus., tables, 1968.

272-555 **Voytsik, L. R.; Yerozolimskiy, B. G.** Issledovaniya ionnogo istochnika neytronnoy trubki [Investigations of a neutron tube ion source], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 144-147, illus., 1968.

272-556 **Voytsik, L. R.; Yerozolimskiy, B. G.** Defokusirovka ionnogo puchka na misheni neytronnoy trubki [Defocusing of an ion beam on the target of a neutron tube], *in* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii, Trudy, no. 1, p. 148-151, illus., 1968.

264-142 **Voyutskiy, V. S.; Vishnyakov, Ye. P.** Korrelyatsionnyy analiz seysmicheskikh zapisey magnitnoy stantsii "Zemlya" [Correlational analysis of seismic records of a "Zemlya" magnetic station]: Prikladnaya Geofizika, no. 51, p. 61-67, illus., tables, 1968.

Vozhakova, L. V. See *Pavlov, A. V. 272-377*

267-266 **Voznesenskiy, V. D.; Dukhovskiy, A. A.** O stroyenii poverkhnosti dokembriyskogo metamorficheskogo kompleksa v severo-zapadnoy chasti Dzhungaro-Balkhashskoy skladchatoy sistemy [On the structure of the surface of the Precambrian metamorphic complex in the northwestern part of the Dzhungaria-Balkhash folded system]: Geotektonika, no. 5, p. 75-80, illus., table, 1968.

274-178 **Vozoff, K.; Swift, C. M., Jr.** Magneto-telluric measurements in the North German basin: Geophys. Prosp. [Netherlands], v. 16, no. 4, p. 454-473, illus., 1968.

264-222 **Vroman, A. J.** On the fold pattern of Israel and the Levant: Israel Geol. Survey Bull., no. 43, p. 23-31, illus., 1967.

268-225 **Vroman, A. J.** The main tectonic features of the Earth explained by contraction below the crust (with special emphasis on rift-valleys), *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 19-29, illus., 1968.

272-224 **Vrublevskiy, V. T.** Ispol'zovaniye vysokotochnoy gravirazvedki pri poiskakh zolota v Severnom Kazakhstane [Use of high-precision gravity surveying in prospecting for gold in Northern Kazakhstan]: Razvedka i Okhrana Nedr, no. 1, p. 40-44, illus., 1969.

Vuagnat, M. See *Delaloye, M. 269-023*

Vuagnat, Marc. See *Chessex, Ronald. 264-029*

266-527 **Vugman, Z. M.** K vyyavleniyu prirody otrazhennykh voln [On bringing out the nature of reflected waves (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 91-93, illus., 1967.

270-282 **Vukašinović, Slobodan.** Znaćaj magnetnih merenja pri istraživanju nafte sa osvrtom na eksperimentalna aeromagnetska ispitivanja u Vojvodini [The importance of magnetic measurements in oil exploration with regard to an experimental aeromagnetic investigation in Vojvodina (with English summ.)]: Inst. Geol.-Rud. Istraživanja i Istpitivanja Nuklearnih i Drugih Mineral. Sirovina Radovi, v. 3, p. 111-116, illus., 1967.

270-283 **Vukašinović, Slobodan.** Prikaz i geološka interpretacija anomalnog magnetnog polja (ΔT) Jugoistočne Srbije [Review and geologic interpretation of anomalies of the magnetic field (ΔT) in southeastern Serbia (with English summ.)]: Inst. Geol.-Rud. Istraživanja i Istpitivanja Nuklearnih i Drugih Mineral. Sirovina Radovi, v. 4, p. 161-170, illus., 1968.

Vvedenskaya, A. V. See *Balakina, L. M. 266-146*

Vvedenskaya, A. V. See *Balakina, L. M. 275-108*

264-128 **Vvedenskaya, N. A.; Kondorskaya, N. V.; Kotenko, N. N.** Sil'nyye zemletryaseniya na territorii SSSR v 1964 g. [Strong earthquakes in the territory of the U.S.S.R. in 1964], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 5-11, illus., tables, 1967.

265-163 **Vvedenskaya, N. A.; Kondorskaya, N. V.; Kotenko, N. N.** Sil'nyye zemletryaseniya na territorii SSSR v 1965 g. [Strong earthquakes in the territory of the U.S.S.R. in 1965], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 5-12, illus., tables, 1967.

266-518 **Vygodner, S. A.** O gruppirovanii vzryvov na dlinnykh bazakh v metode otrazhennykh voln [On the grouping of charges on long bases in the reflection method]: Razved. Geofizika, no. 25, p. 20-27, illus., 1968.

264-255 **Vyskočil, Vincenc.** Comments on the mathematical statistics method of estimating the accuracy of numerical interpolation: Československá Akad. Věd Studi Geophys. et Geod., v. 16, no. 2, p. 149-153, 1968.

275-190 **Vyskočil, Vincenc.** K voprosu o tochnosti chislennoy interpolyatsi geofizicheskikh velichin [On the problem of the accuracy of numerical interpolatio of geophysical values (with English and Czech summ.)]: Československá Akad Věd Geofys. Sborník, v. 15, no. 266, p. 77-90, tables, 1967 (1968).

Waak, J. A. See *Hobbs, R. W. 268-057*

265-150 **Wada, Tatsuhiko; Sudo, Yasuaki.** Focal mechanism of volcanic earthquake of the Volcano Aso: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 151-160, illus., table, 1967.

264-080 **Wade, F. Alton; DeWys, Jane Negus.** Permafrost features on the Martian surface: Icarus, v. 9, no. 1, p. 175-185, illus., 1968.

Wade, F. Alton. See *LeMasurier, Wesley E. 266-548*

271-062 **Wadia, D. N.** The Koyna earthquake—December 1967: Indian Geophys. Union Jour., v. 5, no. 1, p. 6-8, 1968.

Wageman, John M. See *Hilde, Thomas W. C. 273-487*

Wagener, K. See *Möller, P. 269-037*

Wagner, C. See *Stiller, H. 272-148*

267-254 **Wagner, Carl A.; Douglas, Bruce C.** Resonant perturbations of existing satellites: Nature, v. 220, no. 5170, p. 898-899, table, 1968.

268-258 **Wagner, Carl A.** Combined solution for low degree longitude harmonics of gravity from 12- and 24-hour satellites: Jour. Geophys. Research, v. 73, no. 24, p. 7651-7660, illus., tables, 1968.

274-326 **Wagner, Christian-Ulrich.** The "semi-annual" variation of the solar daily quiet geomagnetic variation in the European region: Gerlands Beitr. Geophysik, v. 78, no. 2, p. 120-130, illus., table, 1969.

Wagner, Chr.-Ulr. See *Best, A. 272-328*

264-349 **Wagner, C.-U.** About a 'semi-annual' variation of the amplitude of the geomagnetic Sq-variations in median latitudes: Jour. Atmos. and Terrest. Physics, v. 30, no. 4, p. 579-589, illus., tables, 1968.

264-012 **Wagner, G. A.** Fission track dating of apatites: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 411-415, illus., 1968.

Wahlen, M. See *Loosli, H. H. 269-058*

270-002 **Wahrhaftig, Clyde; Wolfe, Jack A.; Leopold, Estella B.; Lanphere, Marvin A.** The coal-bearing group in the Nenana coal field, Alaska: U.S. Geol. Survey Bull. 1274-D, p. D1-D30, illus., table, 1969.

270-027 **Wai, C. M.; Wetherill, G. W.; Wasson, J. T.** The distribution of trace quantities of germanium between metal, silicate and sulfide phases: Geochim. et Cosmochim. Acta, v. 32, no. 12, p. 1269-1278, illus., 1968.

Wainerdi, R. E. See *Santos, G. P. 271-556*

269-285 **Wainwright, M.** An introduction to the use of geophysical techniques in the search for ground water: Mysore Dept. Mines and Geology Groundwater Studies, no. 1, 13 p., illus., 1967.

265-214 **Wait, James R.** Influence of a thin inhomogeneous surface layer on electromagnetic ground wave propagation: IEEE Proc., v. 55, no. 4, p. 568-569, illus., 1967.

273-309 **Waite, J. M.** Anomalies in the thermoluminescence of the Austin Chalk of Texas—reply to comment by McDougall: Jour. Sed. Petrology, v. 39, no. 1, p. 395, 1969.

Waite, W. P. See *Moore, R. K. 270-115*

Waite, William P. See *Rouse, John Wilson, Jr. 274-168*

Wako, Yasujiro. See *Yumi, Shigeru. 266-302*

270-475 **Walker, Barth P.** The log analyst as an expert witness in court: Log Analyst, v. 9, no. 2, p. 3-6, 1968.

Walker, David. See *Powell, J. L. 275-006*

267-158 **Walker, J. W.; Pearce, D. C.; Zanella, A. H.** Airborne radar sounding of the Greenland ice cap: Flight 1: Geol. Soc. America Bull., v. 79, no. 11, p. 1639-1646, illus., 1968.

265-217 **Walker, John W.** Long-distance airborne glacial sounding—Tech. Rept. ECOM-2887: Fort Monmouth, N. J., U.S. Army Electronics Command, 12 p., illus., 1967.

Walker, R. M. See *Fleischer, R. L. 273-005*

Walker, Robert M. See *Fleischer, Robert L. 267-018*

Wall, D. See *Phillips, J. D. 264-389*

266-268 **Wallace, Robert E.** Notes on stream channels offset by the San Andreas fault, southern Coast Ranges, California, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 6-20, illus.; discussion p. 20-21, 1968.

Wallace, Robert E. See *Brown, Robert D., Jr. 266-269*

272-526 **Wallace, W. E.** Observations on the S.P. curve in general and offshore problems in particular, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. A1-A14, illus., 1968.

270-061 **Waller, Roger M.** Water-sediment ejections, *in* The great Alaska earthquake of 1964—Hydrology, Pt. A: Natl. Acad. Sci. Pub. 1603, p. 97-116, illus., table, 1968.

Wallington, V. See *Rothwell, P. 269-395*

274-095 **Walpole, W. R.; Shepherd, R.** Dynamic elasto-plastic response of reinforced concrete spandrel frame: Seismol. Soc. America Bull., v. 59, no. 2, p. 855-864, illus., tables, 1969.

273-114 **Walsh, J. B.** Dip angle of faults as calculated from surface deformation: Jour. Geophys. Research, v. 74, no. 8, p. 2070-2080, illus., 1969.

Walstrom, J. E. See *Schouler, A. B. 274-471*

272-530 **Walters, E. J.** Statistical study of neutron logs for correlation studies, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. F1-F15, illus., table, 1968.

270-460 **Walther, H. C.; Meese, A. D.** Comments on induced polarization in sandstones—[discussion of paper by R. J. Schoeppel and J. E. Thrasher, 1966]: Log Analyst, v. 7, no. 1, p. 33-34, illus., 1966.

274-467 **Walther, H. C.** Saturation from logs—Laboratory measurements of logging parameters: Jour. Petroleum Technology, v. 20, no. 3, p. 251-258, illus., tables, 1968.

Walther, H. W. See *Harre, W. 273-038*

Walther, Karl-Friedrich. See *Knothe, Christian. 270-378*

267-020 **Walton, A.; Baxter, M. S.** Calibration of the radiocarbon time scale: Nature, v 220, no. 5166, p. 475-476, tables, 1968.

Walton, A. See *Baxter, M. S. 271-006*

272-114 **Walzer, Uwe.** Eine zur Erhohung des Signal-Rausch-Verhaltnisses benutzbare Eigenschaft der Mikroseismik [A property of microseismics useful for the improvement of the signal-to-noise ratio (with Russian summ.)]: Ceskoslovenska Akad. Ved Studia Geophys. et Geod., v. 12, no. 4, p. 363-376, illus., 1968.

275-416 **Wang, Chao-Siang.** Continental terrace—Its initiation, growth and destruction: Acta. Geol. Taiwanica, no. 12, p. 59-74, illus., 1968.

266-381 **Wang, Chi-Yuen.** Constitution of the lower mantle as evidenced from shock wave data for some rocks: Jour. Geophys. Research, v. 73, no. 20, p. 6459-6476, illus., tables, 1968.

271-307 **Wang, Chi-Yuen.** Equation of state of periclase and some of its geophysical implications: Jour. Geophys. Research, v. 74, no. 6, p. 1451-1457, illus., tables, 1969.

Wanless, R. K. See *Aumento, F. 265-003*

267-019 **Wanless, R. K.; Stevens, R. D.; Lachance, G. R.; Edmonds, C. M.** Age determinations and geological studies—K-Ar isotopic ages, Rept. 8: Canada Geol. Survey Paper 67-2, pt. A, 141 p., tables, 1968.

266-099 **Ward, H. S.** Earthquake load provisions of the National Building Code of Canada: Natl. Research Council Canada Div. Bldg. Research Tech. Paper 211, 13 p., illus., tables, 1966.

266-555 **Ward, P. L.; Matumoto, T.** A summary of volcanic and seismic activity in Katmai National Monument, Alaska: Bull. Volcanol., v. 31, p. 107-129, illus., tables, 1968.

269-181 **Ward, Peter L.; Palmason, Gudmundur; Drake, Charles.** Microearthquake survey and the Mid-Atlantic Ridge in Iceland: Jour. Geophys. Research, v. 74, no. 2, p. 665-684, illus., 1969.

265-210 **Ward, S. H.; O'Brien, D. P.; Parry, J. R.; McKnight, B. K.** Afmag—Interpretation: Geophysics, v. 33, no. 4, p. 621-644, illus., 1968.

Ward, S. H. See *Bodmer, Rene. 266-204; Mirbagheri, M. 270-099*

Ward, Stanley H. See *Bodmer, Rene. 266-207*

270-452 **Warden, A. J.** (and others). The geology of the Central Islands: New Hebrides Condominium Geol. Survey Rept., no. 5, 108 p., illus., tables, 1967.

274-464 **Warden, A. J.** Volcanology: New Hebrides Geol. Survey Ann. Rept. 1963, p. 12-15, illus., 1965.

Warman, J. C. See *Joiner, T. J. 265-216*

269-238 **Warner, Don L.** Preliminary field studies using earth resistivity measurements for delineating zones of contaminated ground water: Ground Water, v. 7, no. 1, p. 9-16, illus., 1969.

Warnock, W. W. See *Dickel, J. R. 268-090*

Warren, C. S. See *Freeman, J. W., Jr. 265-382*

265-612 **Warren, David H.** Transcontinental geophysical survey (35°-39° N)—Seismic refraction profiles of the crust and upper mantle from 87° to 100° W longitude: U.S. Geol. Survey Misc. Geol. Inv. Map I-534-D, scale 1:1,000,000, separate text, 1968.

269-605 **Warren, David H.** A seismic-refraction survey of crustal structure in central Arizona: Geol. Soc. America Bull., v. 80, no. 2, p. 257-282, illus., tables, 1969.

269-219 **Warren, Nicholas.** Elastic constants versus porosity for a highly porous ceramic, perlite: Jour. Geophys. Research, v. 74, no. 2, p. 713-719, illus., tables, 1969.

275-250 **Warren, Robert E.; Sclater, John G.; Vacquier, Victor; Roy, Robert F.** A comparison of terrestrial heat flow and transient geomagnetic fluctuations in the southwestern United States: Geophysics, v. 34, no. 3, p. 463-478, illus., tables, 1969.

268-415 **Wasilewski, Peter J.** Magnetization of ocean basalts: Jour. Geomagnetism and Geoelectricity, v. 20, no. 3, p. 129-154, illus., tables, 1968.

267-355 **Wasserburg, G. J.; Mazor, E.** Spontaneous fission xenon in natural gases, *in* Nuclear geology on geothermal areas-Spoleto 1962: Pisa, Italy, Lab. Geol. Nucleare, p. 71-93, illus., tables [1967].

264-042 **Wasserburg, G. J.; Sanz, H. G.; Bence, A. E.** Potassium-feldspar phenocrysts in the surface of Colomera, an iron meteorite: Science, v. 161, no. 3842, p. 684-687, table, 1968.

269-041 **Wasserburg, G. J.; Steiger, R. H.** Systematics in the Pb-U-Th systems and multiphase assemblages, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 331-347, illus., tables, 1967.

Wasserburg, G. J. See *Bogard, D. D. 272-046*

Wasserburg, G. J. See *Papanastassiou, D. A. 272-047*

Wasserburg, G. J. See *Eugster, O. 275-034*

Wasson, J. T. See *Alder, B. 269-038; Wai, C. M. 270-027*

Wasson, John T. See *Tandon, S. N. 267-059; Buchwald, V. F. 274-038*

274-041 **Wasson, John T.** Primordial rare gases in the atmosphere of the Earth: Nature, v. 223, no. 5202, p. 163-165, illus., 1969.

272-128 **Watanabe, Hideo.** Descriptive table of tsunamis in and near Japan [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 4, p. 292-313, illus., 1968.

272-266 **Watanabe, Hikaru; Nakamura, Masao.** On the upper crustal structure in the southwestern part of Kinki district, central Japan [in Japanese with English abs.]: Zisin, ser. 2, v. 21, no. 1, p. 32-53, illus., tables, 1968.

274-009 **Watanabe, Naotune; Suzuki, Masao.** Fission track dating of archaeological glass materials from Japan: Nature, v. 222, no. 5198, p. 1057-1058, illus., table, 1969.

Watanabe, T. See *Jacobs, J. A. 265-399*

269-626 **Watanabe, Takeshi; Takeuchi, Hitoshi.** Computer application to seismic refraction method [in Japanese with English abs.]: Butsuri-Tanko, v. 21, no. 2, p. 67-72, illus., 1968.

275-189 **Watanabe, Takeshi.** On geophysical investigation for civil engineering constructions in foreign countries by Japanese geophysicists [in Japanese with English abs.]: Butsuri-Tanko, v. 21, nos. 5-6, p. 306-309, illus., table, 1968.

Watanabe, Teruhiko. See *Yasui, Masashi. 268-292*

Waters, Aaron C. See *Higgins, Michael W. 275-425*

267-058 **Watkins, C. D.** Height dependence of the effect of the geomagnetic field on meteor trains: Jour. Atmos. and Terrest. Physics, v. 30, no. 10, p. 1827-1832, illus., table, 1968.

Watkins, Joel S. See *Godson, Richard H. 268-538*

264-212 **Watkins, N. D.; Richardson, A.** Comments on the relationship between magnetic anomalies, crustal spreading, and continental drift: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 257-264, illus., 1968; correction , ibid., no. 5, p. 416, 1968.

264-391 **Watkins, N. D.** Short period geomagnetic polarity events in deep-sea sedimentary cores: Earth and Planetary Sci. Letters, v. 4, no. 5, p. 341-349, illus., table, 1968.

265-462 **Watkins, N. D.** Comments on the interpretation of linear magnetic anomalies: Pure and Appl. Geophysics, v. 69, p. 179-192, illus., 1968.

Watkins, N. D. See *Goodell, H. G. 266-448*

266-456 **Watkins, N. D.** Reply [to discussion by E. E. Larson and D. W. Strangway of "Correlation of petrology and natural magnetic polarity in Columbia Plateau basalts" (1967)]: Royal Astron. Soc. Geophys. Jour., v. 15, no. 4, p. 444-447, illus., 1968.

Watkins, N. D. See *Wilson, R. L. 266-459*

Watkins, N. D. See *Goodell, H. G. 267-437*

267-438 **Watkins, N. D.; Richardson, A.; Mason, R. G.** Palaeomagnetism of the Macaronesian insular region—The Cape Verde Islands: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 119-140, illus., tables, 1968.

269-439 **Watkins, N. D.; Richardson, A.** Reply by authors to "Comments on 'Paleomagnetism of the Lisbon volcanics'" by R. Van der Voo [1968]: Royal Astron. Soc. Geophys. Jour., v. 16, no. 5, p. 549-551, 1968.

274-360 **Watkins, N. D.** Non-dipole behaviour during an Upper Miocene geomagnetic polarity transition in Oregon: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 121-149, illus., tables, 1969.

270-428 **Watson, Jerry A.; Johnson, G. Leonard.** Mediterranean diapiric structures: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 11, p. 2247-2248, illus., 1968.

Watson, R. J. See *Levin, F. K. 264-198*

Watson, R. J. See *Foster, M. R. 268-536*

270-166 **Watson, S. J.** Recent advances in geophysical techniques: APEA Jour., v. 8, pt. 2, p. 101-103, illus., 1968.

Watt, J. H. See *Sherwood, J. 266-467*

Watters, W. A. See *Devereux, I. 274-019*

273-256 **Watterson, Juan.** Homogeneous deformation of the gneisses of Vesterland, south-west Greenland: Medd. Gronland, v. 175, no. 6, 73 p., illus., 1968; reprinted as Gronlands Geol. Undersogelse Bull. 73, 1968.

271-021 **Watts, W. A.** A pollen diagram from Mud Lake, Marion County, north-central Florida: Geol. Soc. America Bull., v. 80, no. 4, p. 631-642, illus., 1969.

Wattson, R. B. See *Wood, A. T., Jr. 265-093*

274-468 **Waxman, M. H.; Smits, L. J. M.** Electrical conductivities in oil-bearing shaly sands: Soc. Petroleum Engineers Jour., v. 8, no. 2, p. 107-122, illus., tables, 1968; *reprinted in* Soc. Petroleum Engineers A.I.M.E. Trans., v. 243 (pt. 2), p. 107-122, 1969.

Wayman, P. A. See *Andrews, A. D. 273-046*

271-269 **Weaver, D. F.** A geological interpretation of the Bouguer anomaly field of Newfoundland [with French abs.]: Dominion Observatory Ottawa Pubs., v. 35, no. 5, p 221-251, illus., tables, 1967.

Weaver, J. Scott. See *Mao, Ho-Kwang. 270-239*

269-137 **Weaver, Kenneth F.** The Moon: Natl. Geog. Mag., v. 135, no. 2, p. 207-239, illus., 1969.

Weaver, P. F. See *Yuen, P. C. 272-092*

266-040 **Webb, A. W.; Stevens, N. C.; McDougall, I.** Isotopic age determinations on Tertiary volcanic rocks and intrusives of southeastern Queensland: Royal Soc. Queensland Proc. 1967, v. 79, p. 79-92, illus., table, 1968.

273-034 **Webb, A. W.; McDougall, Ian.** The geochronology of the igneous rocks of eastern Queensland: Geol. Soc. Australia Jour., v. 15, pt. 2, p. 313-346, illus., tables 1968.

271-332 **Webb, Harold D.** Solar flares and magnetic storm of May 21 to 28, 1967: Jour Geophys. Research, v. 74, no. 7, p. 1880-1882, illus., 1969.

269-463 **Weber, C.** Le levé aéromagnétique du Morvan et du Nivernais [Aeromagneti survey of Morvan and of Nivernais]: [France] Bur. Recherches Géol. et. Minières Bull., Ser. 2, sec. 4, Géologie Générale et divers, no. 1, p. 1-15, illus., tables, 1968

270-213 **Weber, C.** Le prolongement oriental des granites de Lanvaux d'apres l gravimetrie et l'aéromagnetisme [The eastern prolongation of the granites of Lanvaux according to gravimetry and aeromagnetism], *in* Contribution de la cart gravimétrique à la géologie du Massif Armoricain: [France] Bur. Recherches Géo et Minières Mém., no. 52, p. 83-90, illus., 1967.

269-613 **Weber, J. R.; Goodacre, A. K.** An analysis of the crust-mantle boundary in Hudson Bay from gravity and seismic observations: Canadian Jour. Earth Sci., v. 5, no. p. 1297-1303, illus., 1968.

270-247 **Weber, Jon N.; Woodhead, Peter M. J.** Factors affecting the carbon and oxyge isotopic composition of marine carbonate sediments—[Pt.] 2, Heron Island, Grea Barrier Reef, Australia: Geochim. et Cosmochim. Acta, v. 33, no. 1, p. 19-38, illus tables, 1969.

Webster, G. M. See *Levin, F. K. 264-198*

Webster, S. S. See *Ringis, J. 267-461*

264-235 **Weertman, J.** Bubble coalescence in ice as a tool for the study of its deformatio history [with French and German abs.]: Jour. Glaciology, v. 7, no. 50, p. 155-159, i lus., 1968.

264-236 **Weertman, J.** Diffusion law for the dispersion of hard particles in an ice matr that undergoes simple shear deformation [with French and German abs.]: Jou Glaciology, v. 7, no. 50, p. 161-165, illus., table, 1968.

264-532 **Weertman, J.** Rate of growth of fatigue cracks calculated from the theory of i finitesimal dislocations distributed on a plane: Internat. Jour. Fracture Mechanics, 2, no. 2, p. 460-467, illus., 1966.

270-204 **Weertman, J.** Diffusion law for the dispersion of hard particles in an ice matr that undergoes simple shear deformation: U.S. Army Materiel Command Cold R gions Research and Eng. Lab. Research Rept. 252, 6 p., illus., table, 1968.

271-261 **Weertman, J.** Bubble coalescence in ice as a tool for the study of its deformati history: U.S. Army Materiel Command Cold Regions Research and Eng. La Research Rept. 251, 5 p., illus., 1968.

274-242 **Wegmann, Eugène.** Évolution des idées sur le déplacement des lignes de rivage [Evolution of ideas on shoreline displacement]: Soc. Vaudoise Sci. Nat. Mem., v. 14, pt. 4, no. 88, p. 129-190, illus., 1967.

Weichert, D. H. See *Manchee, E. B. 267-097*

271-056 **Weichert, D. H.** Epicentre determination by seismic arrays: Nature, v. 222, no. 5189, p. 155, table, 1969.

273-178 **Weidelt, Peter.** Zur Tiefenlage und Grosse des Dichtemaximums der induzierten Erdstrome [On the depth and value of the density maximum of the induced earth current (with English summ.)]: Zeitschr. Geophysik, v. 35, no. 2, p. 191-205, illus., 1969.

Weidner, Don K. See *Lou, Y. S. 275-053*

Weigel, W. See *Aric, K. 267-585*

Weihrauch, J. H. See *Fechtig, H. 264-038*

Weimer, R. J. See *Hoyt, J. H. 266-014*

Weimer, Robert J. See *Hollister, John C. 266-092*

Weimer, Robert J. See *Hollister, John C. 266-093*

267-394 **Weinberg, J. L.; Mann, H. M.; Hutchison, P. B.** Polarization of the nightglow—Line versus continuum: Planetary and Space Sci., v. 16, no. 10, p. 1291-1296, illus., tables, 1968.

264-156 **Weinstein, Marvin S.** Spectra of acoustic and seismic signals generated by underwater explosions during Chase experiment: Jour. Geophys. Research, v. 73, no. 16, p. 5473-5476, illus., table, 1968.

273-252 **Weiss, L. E.** Flexural-slip folding of foliated model materials, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 294-357, illus.; discussion, p. 358-359, 1969.

274-222 **Weiss, Richard R.; Swarm, H. Myron.** A consideration of scatter from a continuous medium caused by slight gradients in the phase-velocity profile: Trend Eng., v. 21, no. 2, p. 22-27, illus., 1969.

Weissmann, S. See *Braun, R. L. 273-478*

Welch, P. A. See *Forbes, F. F. 268-062*

Welch, William J. See *Buhl, David. 264-061*

Welch, William J. See *Buhl, David. 268-042*

264-307 **Welke, H.; Moorbath, S.; Cumming, G. L.; Sigurdsson, H.** Lead isotope studies on igneous rocks from Iceland: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 221-231, illus., tables, 1968.

Welke, H. See *Moorbath, S. 272-278*

Welke, H. See *Moorbath, S. 272-279*

268-142 **Welkner, Peter M.** On the space distribution of some seismic parameters in Japan, Pt. 1: Internat. Inst. Seismology and Earthquake Eng. Bull., v. 4, p. 1-18, illus., tables, 1967.

273-269 **Wellman, H. W.** Tilted marine beach ridges at Cape Turakirae, N. Z., *in* Sea level changes and crustal movements of the Pacific . . . Pacific Sci. Cong., 11th, Tokyo, 1966, Symposium 19: Osaka City Univ. Jour. Geosciences, v. 10, Art. 1, p. 123-129, illus., 1967.

274-213 **Wells, A. T., Stewart, A. J.; Skwarko, S. K.** Geology of the southeastern part of the Amadeus Basin, Northern Territory: Australia Bur. Mineral Resources, Geology and Geophysics Rept., no. 88, 59 p., illus., tables, 1966.

Wells, J. C. See *Schouler, A. B. 274-471*

274-062 **Wells, R. A.** An introduction to the Martian grid system: Royal Astron. Soc. Geophys. Jour., v. 17, no. 2, p. 209-224, illus., 1969.

274-140 **Wells, W. M.** Calculation of shrinkage of the Salmon cavity: Jour. Geophys. Research, v. 74, no. 10, p. 2791-2794, illus., 1969.

274-302 **Welte, Dietrich H.** C-13:C-12 isotope ratios of individual n-paraffins and the implication of their origin: Naturwissenschaften, v. 56, no. 3, p. 133-134, illus., 1969.

Wende, C. D. See *VanAllen, J. A. 273-346*

Wendt, I. See *Brooks, C. 268-001*

264-390 **Wensink, H.; Klootwijk, C. T.** The paleomagnetism of the Talchir Series of the lower Gondwana System, central India: Earth and Planetary Sci. Letters, v. 4, no. 3, p. 191-196, illus., 1968.

266-277 **Wentworth, Carl M.** Upper Cretaceous and lower Tertiary strata near Gualala, California, and inferred large right slip on the San Andreas fault, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 130-143, illus., 1968.

268-437 **Werner, S.** The aeromagnetic maps, *in* Description of the geological maps Kiruna NW, NE, SW, SE by Jan Offerberg: Sveriges Geol. Undersokning Berggrundsgeol och Geofys. Kartblad, Ser. Af, nos. 1-4, app., p. 137-147, illus., 1967.

West, G. F. See *Scott, W. J. 271-142*

West, George S., Jr. See *Lou, Y. S. 275-053*

Westberg, K. See *Horowitz, N. H. 274-049*

273-033 **Westoll, N. D. S.; Miller, J. A.** The ages of some kentallenite intrusions in Argyll Scottish Jour. Geology, v. 5, pt. 1, p. 11-14, table, 1969.

Weston, F. S. See *Forjaz, V. H. 266-558*

Westphal, Karl O. See *McKenzie, James F. 275-306*

Westphal, M. See *Nairn, A. E. M. 272-361*

Wetherill, G. W. See *Gopalan, K. 267-053*

Wetherill, G. W. See *Wai, C. M. 270-027*

Wetherill, G. W. See *Bickford, M. E. 271-001*

Wetherill, G. W. See *Kaushal, Sushil K. 274-030*

Wetzel, Erika. See *Knothe, Christian. 270-338*

266-550 **Weyl, R.** Volcanoes and volcanic rocks in Central America and the West Indies Bull. Volcanol., v. 31, p. 3-12, illus., 1968.

Wharton, Lawrence C. See *Small, James B. 274-105*

Wheeler, R. L. See *Brueckner, H. K. 268-020*

274-006 **Whelan, J. A.** Geochronology of some Utah rocks, *in* Guidebook of northern Utah: Utah Geol. and Mineralog. Survey Bull. 82, p. 97-104, tables, 1969.

Whitaker, E. A. See *Shoemaker, E. M. 268-078*

Whitaker, E. A. See *Shoemaker, E. M. 275-071*

270-362 **White, A. H.** Exploration in the Otway basin: APEA Jour., v. 8, pt. 2, p. 78-87, illus., 1968.

267-352 **White, Donald E.; Craig, Harmon; Begemann, Fred.** Summary of the geology and isotope geochemistry of Steamboat Springs, Nevada,*in* Nuclear geology on geothermal areas—Spoleto 1963 (E. Tongiorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 9-16 [1967].

White, Donald E. See *Clayton, R. N. 268-355*

White, E. J. See *Marchant, L. C. 272-536*

White, R. E. See *Sutton, D. J. 266-116*

273-123 **White, R. E.** Seismic phases recorded in South Australia and their relation to crustal structure: Royal Astron. Soc. Geophys. Jour., v. 17, no. 3, p. 249-261, illus., tables, 1969.

274-221 **White, Robert M.** Geophysical data management—Why, and how,: Computers and Automation, v. 18, no. 4, p. 20-23, 1969.

White, W. H. See *Sinclair, A. J. 275-010*

268-534 **White, W. R. H.; Bone, M. N.; Milne, W. G.** Seismic refraction surveys in British Columbia, 1941-1966—A preliminary interpretation, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 81-93, illus., 1968.

275-011 **White, William H.; Harakal, J. E.; Carter, N. C.** Potassium-argon ages of some ore deposits in British Columbia: Canadian Mining and Metall. Bull., v. 61, no. 679, p. 1326-1334, illus., table, 1968; Canadian Inst. Mining and Metallurgy Trans. 1968, v. 71, p. 363-371, illus., table, 1968.

267-156 **Whitebread, Donald H.; Hoover, Donald B.** Preliminary results of geological, geochemical, and geophysical studies in part of the Virginia City quadrangle, Nevada: U.S. Geol. Survey Circ. 596, 20 p., illus., table, 1968.

Whitehead, J. A. See *Schubert, G. 268-052*

Whiteley, R. J. See *Emerson, D. W. 270-125*

Whitham, Kenneth. See *Smith, W. E. T. 269-190*

267-288 **Whiting, Robert L.** Geothermal energy and resources: Oil and Gas Compact Bull., v. 27, no. 1, p. 15-21, illus., table, 1968.

Whitman, Walter W. See *Porter, Chris R. 274-488*

Whitmarsh, R. B. See *Roberts, D. G. 272-380*

268-212 **Whitten, Charles A.** Geodetic measurements of the study of crustal movements, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 342-345, 1968.

Whittlesey, John R. B. See *Middleton, David. 265-604*

269-602 **Wickens, A. J.; Pec, K.** A crust-mantle profile from Mould Bay, Canada, to Tuc son, Arizona: Seismol. Soc. America Bull., v. 58, no. 6, p. 1821-1831, illus., table 1968.

268-618 **Wickman, Frans E.** Repose period patterns of volcanoes—[Pt.] 5, Genera discussion and a tentative stochastic model: Arkiv Mineralogi och Geologi, v. 4, pt. (no. 11), p. 351-367, illus., tables, 1968.

Wideman, C. J. See *Romig, P. R. 275-135*

268-582 **Wiebolds, G. A.; Cook, N. G. W.** An energy criterion for the strength of rock i polyaxial compression: Internat. Jour. Rock Mechanics and Mining Sci., v. 5, no. 6 p. 529-549, illus., 1968.

Wienholz, Roland. See *Muller, E. Peter. 265-372*

270-375 **Wierzchon, K.** Schlagseismische Apparatur [Hammer-blow seismic apparatus] Freiberger Forschungshefte, C 225, p. 143-149, illus., 1967.

270-365 **Wierzchowska, Z.** Untersuchungen von Gebirgsschlagen und Gebirgserschüt terungen in Gorny Slask unter Anwendung seismologischer Methoden [Investiga tions of rock bursts and mine bumps in the Silesia Mountains by application c seismological methods]: Freiberger Forschungshefte, C 255, p. 31-40, illus., tabl 1967.

264-095 **Wiggins, Ralph A.** Terrestrial variational tables for the periods and attenuation c the free oscillations: Physics Earth and Planetary Interiors, v. 1, no. 4, p. 201-266, i lus., tables, 1968.

267-383 **Wilcox, John M.** Asymmetry in geomagnetic response to the polarity of the inte planetary magnetic field: Jour. Geophys. Research, v. 73, no. 21, p. 6835-6836, illus 1968.

Wilcox, John T. See *Stearns, Richard G. 273-074*

270-054 **Wildey, Robert L.** The nocturnal heat sources of the surface of the Moon: Roy Astron. Soc. Monthly Notices, v. 139, no. 4, p. 471-477, illus., table, 1968.

268-372 **Wilhelm, Klaus.** Occurrence of Pc 1 pulsations in the course of magnetospher substorms: Jour. Geophys. Research, v. 73, no. 23, p. 7491-7501, illus., table, 1968

268-176 **Wilhjelm, J.** Non-random influence of external sources on a geomagneticindu tion anomaly in the northern part of Greenland: Royal Astron. Soc. Geophys. Jou v. 16, no. 3, p. 259-273, illus., table, 1968.

Wilkinson, I. See *Lowes, F. J. 265-395*

273-479 **Willard, R. J.; McWilliams, J. R.** Microstructural techniques in the study physical properties of rock: Internat. Jour. Rock Mechanics and Mining Sci., v. 6, r 1, p. 1-12, illus., tables, 1969.

Williams, C. A. See *Matthews, D. H. 264-213*

273-343 **Williams, D. J.; Bostrom, C. O.** Proton entry into the magnetosphere on May 2 1967: Jour. Geophys. Research, v. 74, no. 11, p. 3019-3026, illus., 1969.

Williams, G. K. See *Tanner, W. F. 267-598*

275-422 **Williams, Howel; Goles, Gordon.** Volume of the Mazama ash-fall and the ori of Crater Lake caldera, *in* Andesite conference guidebook—Internat. Upper Mar Proj. Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Industries Bull. 62, p. 41, illus., 1968.

Williams, J. A. See *Snow, R. B. 272-527*

72-100 **Williams, John A.; Kartha, T. D. Krishna.** Model study of long-wave amplification by circular islands: Seismol. Soc. America Bull., v. 59, no. 1, p. 299-316, illus., tables, 1969.

69-064 **Williams, P. H.; Florkowski, T.** Comparison of triton-X emulsion systems with dioxane solutions in liquid scintillation counting of low-level tritium in water, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 703-709, illus., table, 1967.

Williams, R. E. G. See *Shotton, F. W. 265-011*

Williams, W. R. See *Brown, G. M. 272-322*

70-340 **Williamson, A. N.** Gamma-ray measurements to evaluate soil properties, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 737-746, illus., 1968.

72-318 **Willis, D. M.** The influx of charged particles at the magnetic cusps on the boundary of the magnetosphere: Planetary and Space Sci., v. 17, no. 3, p. 339-348, illus., 1969.

Willis, Eric H. See *Buckley, James D. 265-013*

Willis, Eric H. See *Buckley, James D. 271-007*

Willis, J. P. See *Ahrens, L. H. 200-002*

Willis, J. P. See *VonMichaelis, H. 272-049*

Willis, J. P. See *VonMichaelis, H. 272-050*

65-015 **Willkomm, H.; Erlenkeuser, H.** University of Kiel radiocarbon measurements III: Radiocarbon, v. 10, no. 2, p. 328-332, 1968.

66-036 **Willkomm, H.** Absolute Altersbestimmungen mit der C-14 Methode [Absolute age determinations with the C-14 method]: Naturwissenschaften, v. 55, no. 9, p. 415-418, illus., 1968.

Willmore, P. L. See *Arnold, E. P. 266-157*

67-125 **Willmore, P. L.; Arnold, E. P.; Kondorskaya, N. V.** Sovremennoye polozheniye i razvitiye issledovaniya v Mezhdunarodnom seysmologicheskom Tsentre [Present status and development of investigation in the International Seismological Center]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 34-44, illus., table, 1968.

Wilmeth, R. See *Lowdon, J. A. 271-005*

66-069 **Wilshire, H. G.; Howard, Keith A.** Structural pattern in central uplifts of cryptoexplosion structures as typified by Sierra Madera: Science, v. 162, no. 3850, p. 258-261, illus., 1968.

Wilshire, Howard G. See *Jackson, Everett D. 268-044*

71-052 **Wilson, Basil W.; Torum, Alf.** The tsunami of the Alaskan earthquake 1964—Engineering evaluation: U.S. Army Corps Engineers Coastal Eng. Research Center Tech. Memo. 25, [444] p., illus., tables, 1968.

Wilson, Charles W., Jr. See *Stearns, Richard G. 273-074*

72-529 **Wilson, G. J.** Radius of curvature method for computing directional surveys, *in* SPWLA Logging Symposium, 9th Ann., New Orleans, La., 1968, Trans: Houston, Tex., Soc. Prof. Well Log Analysts, p. D1-D11, lus., 1968.

268-218 **Wilson, J. Tuzo.** Static or mobile earth—The current scientific revolution, *i*
Gondwanaland revisited:New evidence for continental drift: Am. Philos. Soc.
Proc., v. 112, no. 5, p. 309-320, illus., table, 1968.

269-308 **Wilson, J. Tuzo.** A revolution in earth science: Canadian Mining and Metal
Bull., v. 61, no. 670, p. 185-192, illus., 1968; *reprinted in* Debate about the Earth
Geotimes, v. 13, no. 10, p. 10-16, illus., 1968; reply to V. V. Belousov, ibid., p. 20-22
illus., 1968.

271-151 **Wilson, J. Tuzo.** A theory of planetary behaviour: Indian Geophys. Union Jour.
v. 3, no. 4, p. 121-137, illus., 1966.

271-187 **Wilson, J. Tuzo.** Rift valleys and continental drift: Leicester Literary and Philos
Soc. Trans. 1966-67, v. 61 (Leicester Univ. Dept. Geology Pub. 161), p. 22-35, illus
1967.

274-233 **Wilson, J. Tuzo.** The current revolution in earth science: Royal Soc. Canad
Trans., v. 6, sec. 3, p. 273-281, 1968.

264-014 **Wilson, John Andrew; Twiss, P. C.; DeFord, Ronald K.; Clabaugh, S. E.** Strat-
graphic succession, potassium-argon dates, and vertebrate faunas, Vieja Group, Ri
Rock country, Trans-Pecos, Texas: Am. Jour. Sci., v. 266, no. 7, p. 590-604, illus., ta
bles, 1968.

Wilson, Margaret D. See *McDiarmid, I. B. 268-364*

266-455 **Wilson, R. L.** Reply [to discussion by E. E. Larson and D. W. Strangway of "Co
relation of petrology and natural magnetic polarity in Columbia Plateau basalts
(1967)]: Royal Astron. Soc. Geophys. Jour., v. 155, no. 4, p. 443-444, illus., 1968.

266-459 **Wilson, R. L.; Haggerty, S. E.; Watkins, N. D.** Variation of palaeomagnetic st
bility and other parameters in a vertical traverse of a single Icelandic lava: Royal A
tron. Soc. Geophys. Jour., v. 16, no. 1, p. 79-96, illus., tables, 1968.

Wilson, R. L. See *Ade-Hall, J. M. 269-434*

Wilson, R. L. See *Ade-Hall, J. M. 269-435*

Wilson, R. L. See *Ade-Hall, J. M. 269-436*

267-301 **Wilson, S. H.** Chemical investigations at Waiotapu, *in* Waiotapu geotherm
field: New Zealand Dept. Sci. and Indus. Research Bull. 155, p. 87-118, tables, 196

Wilson, S. H. See *Rafter, T. A. 267-357*

267-358 **Wilson, S. H.** Tritium determinations on bore waters in the light of chlorid
enthalpy relations, *in* Nuclear geology on geothermal areas—Spoleto 1963 (E. To
giorgi, editor): Pisa, Italy, Laboratorio Geologia Nucleare, p. 173-184, illus., tab
[1967].

Wimmenauer, W. See *Lauer, J. P. 265-446*

Wimmenauer, Wolfhard. See *Giermann, Gunter. 267-614*

266-425 **Winch, D. E.** Analysis of the geomagnetic field by means of Cartesian co
ponents: Physics Earth and Planetary Interiors, v. 1, no. 5, p. 347-360, illus., tabl
1968.

268-383 **Winch, D. E.** Eccentric geomagnetic dipole potential: Planetary and Space S
v. 16, no. 11, p. 1341-1347, 1968.

268-388 **Winch, D. E.** Multipole analysis and secular variation: Jour. Geomagnetism a
Geoelectricity, v. 20, no. 3, p. 205-210, tables, 1968.

269-397 **Winch, D. E.** New recurrence relations for spherical harmonic functions and their derivatives: Physics Earth and Planetary Interiors, v. 1, no. 6, p. 396-400, 1968.

275-315 **Winch, D. E.** Noncyclic variation and S_q harmonic dials: Pure and Appl. Geophysics, v. 74, p. 5-15, table, 1969.

275-316 **Winch, D. E.; Malin, S. R. C.** Changes in geomagnetic multipole parameters 1942.5-1962.5: Pure and Appl. Geophysics, v. 74, p. 16-22, tables, 1969.

Winckler, J. R. See *Lezniak, T. W. 265-383*

Winckler, J. R. See *Parks, G. K. 265-389*

Windle, D. W. See *Sozou, C. 272-320*

Windle, D. W. See *Kendall, P. C. 274-320*

Windle, D. W. See *Sozou, D. 275-305*

Wing, C. See *Bock, R. O. 264-248*

273-216 **Winkler, H. A.** Treatment of non-equispaced two-dimensional data with a digital computer—A discussion [of paper by I. K. Crain and B. K. Bhattacharyya, 1967]: Geoexploration, v. 7, no. 1, p. 63-64, 1969.

268-085 **Winn, F. B.** Post-landing tracking data analysis, *in* Surveyor VII mission report—Part 2, Science results: California Inst. Technology Jet Propulsion Lab. Tech. Rept. 32-1264, p. 315-327, illus., 1968.

275-078 **Winn, F. B.** Surveyor post-touchdown analysis of tracking data, *in* Surveyor project final report—Pt. 2, Science results: California Inst. Technology, Jet Propulsion Lab. Tech. Rept. 32-1265, p. 407-440, illus., 1969.

Winstanley, E. H. See *Beynon, W. J. G. 274-318*

275-081 **Winter, D. F.; Saari, J. M.** A particulate thermophysical model of the lunar soil: Astrophys. Jour., v. 156, no. 3, pt. 1, p. 1135-1151, illus., 1969.

265-226 **Winter, R.** Geomagnetic deep-sounding at the Rhinegraben—[Pt.] 1, Measurements of the magnetic variations, *in* The Rhinegraben progress report 1967: Baden-Wurttemberg Geol. Landesamt Abh., no. 6, (also Internat. Upper Mantle Project Sci. Rept. 13 and Alsace-Lorraine Service Carte Geol. Mem., no. 26), p. 127-130, illus., 1967.

271-507 **Winterer, E. L.; Curray, J. R.; Peterson, M. N. A.** Geologic history of the intersection of the Pioneer Fracture Zone with the Delgada Deep-Sea Fan, northeast Pacific: Deep-Sea Research, v. 15, no. 5, p. 509-520, illus., 1968.

266-260 **Winterer, Edward L.** Tectonic erosion in the Roberts Mountains, Nevada: Jour. Geology, v. 76, no. 3, p. 347-357, illus., 1968.

274-437 **Winterhalter, B.** Akustinen reflektioloutain merigeologisessa tutkimuksessa [The seismic reflection profiler—A valuable aid to marine geology (with English abs.)]: Geologi, v. 21, no. 5, p. 57-61, illus., 1969.

272-131 **Wirth, Hans.** Systematische Aufzeichnungsfehler bei Erdgezeiten-Registrieranlagen mit Gravimetern und Galvanometern [Systematic recording errors in earth tide registration with gravimeter and galvanometer (with English summ.)]: Gerlands Beitr. Geophysik, v. 77, no. 5, p. 379-384, illus., 1968.

273-247 **Wise, Donald U.** Regional and sub-continental sized fracture systems detectable by topographic shadow techniques, *in* Research in tectonics: Canada Geol. Survey Paper 68-52, p. 175-198, illus., table; discussion, p. 198-199, 1969.

275-426 **Wise, William S.** Geology of the Mount Hood Volcano, *in* Andesite conference guidebook—Internat. Upper Mantle Proj. Sci. Rept. 16-S: Oregon Dept. Geology and Mineral Industries Bull. 62, p. 81-98, illus., table, 1968.

267-260 **Witte, Bertold.** Die Berechnung von Horizontalableitungen der Schwerestorungen im Aussenraum der Erde aus einer Entwicklung des Potentials nach Kugelfunktionen [The calculation of the horizontal component of the gravity gradient in the external field of the Earth from a development of the potentials of spherical harmonics]: Deutsche Geod. Komm. Veroffentl., ser. C, Dissertationen no. 122, 87 p., illus., table, 1968.

Wittenberg, J. See *McCallum, K. J. 265-019*

Wlodarczak, R. See *D'Hoeraene, J. 274-434*

Wolf, R. A. See *Eviatar, Aharon. 267-376*

267-388 **Wolfe, J. H.; McKibbin, D. D.** Pioneer 6 observations of a steady-state magnetosheath: Planetary and Space Sci., v. 16, no. 8, p. 953-969, illus., 1968.

Wolfe, Jack A. See *Wahrhaftig, Clyde. 270-002*

266-098 **Wolfe, John.** Earthquake history near Lake Tahoe, *in* Geologic studies in the Lake Tahoe area—Geol. Soc. Sacramento, Ann. Field Trip Guidebook, 1968: Sacramento, Calif., Geol. Soc. Sacramento, p. 27-36, illus., tables, 1968.

Wolfe, John H. See *Intriligator, Devrie S. 272-316*

Wölfle, R. See *Herr, W. 269-051*

Wölfle, R. See *Herpers, U. 269-098*

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Wolters, Richard. See *Strasser, Bernd. 274-449*

265-261 **Wong, J. Y.; Linde, R. K.; DeCarli, P. S.** Dynamic electrical resistivity of iron—Evidence for a new high pressure phase: Nature, v. 219, no. 5155, p. 713-714, illus., 1968.

Wood, A. T., Jr. See *Pollack, J. B. 265-089*

265-093 **Wood, A. T., Jr.; Wattson, R. B.; Pollack, J. B.** Venus—Estimates of the surface temperature and pressure from radio and radar measurements: Science, v. 162, no 3849, p. 114-116, illus., table, 1968.

266-337 **Wood, Alan; Woodland, Austin W.** Borehole at Mochras, west of Llanbedr Merionethshire: Nature, v. 219, no. 5161, p. 1352-1354, illus., table, 1968.

268-067 **Wood, Charles A.** Statistics of central peaks in lunar craters: Arizona Univ Lunar and Planetary Lab. Commun., v. 7, no. 120, p. 157-160, illus., 1968.

265-075 **Wood, John A.** Meteorites and the origin of planets: New York and London, Mc Graw-Hill Book Co., 117 p., illus., tables, 1968.

Woodhead, Peter M. J. See *Weber, Jon N. 270-247*

Woodland, Austin W. See *Wood, Alan. 266-337*

270-206 **Woollard, G. P.; Monges Caldera, J.; Rose, J. C.; Kozlosky, J. A.** Catalogo d estaciones gravimetricas en America Latina—[Pt.] 2, America del Sur [Catalog o gravimetric stations in Latin America—(Pt.) 2, South America]: Geofisica Internac v. 7, nos. 3-4, p. 87-211, illus., 1967.

271-270 **Woollard, G. P.; Monges Caldera, J.; Rose, J. C.; Koslosky, J. A.** Catalogo de estaciones gravimetricas en America Latine—[Pt.] 1, México, EE. UU. de A (Texas) y América Central [Catalog of gravimetric stations in Latin America—[Pt.] 1, Mexico, U.S.A. (Texas) and Central America (with English and Spanish text)]: Geofísica Internac., v. 6, nos. 3-4, 86 p., illus., 1966.

268-262 **Woollard, George P.** The interrelationship of the crust, the upper mantle, and isostatic gravity anomalies in the United States, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 312-341, illus., tables, 1968.

Woollard, George P. See *Rose, J. C. 268-263*

Woollard, George P. See *Furumoto, Augustine S. 268-310*

Woollard, George P. See *Manghnani, Murli. 268-321*

Woollard, George P. See *Malahoff, Alexander. 268-428*

272-205 **Woollard, George P.** The relation of gravity anomalies to surface elevation, crustal structure and geology—U.S. Air Force Contract AF 23 (601)-3455, Final Rept.: Wisconsin Univ. Geophys. and Polar Research Center Research Rept. Ser., no. 62-9, 329 p., illus., tables, 1962.

Wordelmann, H. See *Rotter, D. 270-372*

272-490 **World Petroleum.** Seismic profiling of subbottom aids marine engineering: World Petroleum, v. 38, no. 3, p. 28, 30, illus., 1967.

Worthington, A. E. See *Runge, Richard J. 274-477*

265-346 **Worzel, J. Lamar.** Advances in marine geophysical research of continental margins, *in* Symposium on continental margins and island arcs, 3d, Zurich, 1967: Canadian Jour. Earth Sci., v. 5, no. 4, pt. 2, p. 963-983, illus., 1968.

266-243 **Worzel, J. Lamar.** Survey of continental margins, *in* Geology of shelf seas—Inter-University Geol. Cong., 14th, Proc.: Edinburgh and London, Oliver and Boyd, p. 117-152, illus., 1968.

266-510 **Worzel, J. Lamar; Leyden, Robert; Ewing, Maurice.** Newly discovered diapirs in Gulf of Mexico: Am. Assoc. Petroleum Geologists Bull., v. 52, no. 7, p. 1194-1203, illus., 1968.

Worzel, J. Lamar. See *Ewing, Maurice. 275-414*

Wrana, J. See *Adam, Antal. 265-239*

Wright, A. C. See *Crippen, R. G. 272-528*

Wright, C. See *Cleary, J. R. 266-181*

267-312 **Wright, C.** Evidence for a low velocity layer for P waves at a depth close to 800 km: Earth and Planetary Sci. Letters, v. 5, no. 1, p. 35-40, illus., table, 1968.

273-315 **Wright, C.; Muirhead, K. J.** Longitudinal waves from the Novaya Zemlya nuclear explosion of October 27, 1966, recorded at the Warramunga seismic array: Jour. Geophys. Research, v. 74, no. 8, p. 2034-2048, illus., tables, 1969.

Wright, C. S. See *Jacobs, J. A. 264-335*

Wright, Frances W. See *Hodge, Paul W. 268-030*

Wright, Frances W. See *Hodge, Paul W. 275-040*

Wright, Francis W. See *Brownlee, Donald E. 269-088*

264-278 **Wright, J. A.; Garland, G. D.** In situ measurement of thermal conductivity in the presence of transverse anisotropy: Jour. Geophys. Research, v. 73, no. 16, p. 5477-5484, illus., table, 1968.

267-439 **Wright, J. B.** Polarity reversals and oxidation state in rocks: Royal Astron. Soc. Geophys. Jour., v. 16, no. 2, p. 161-167, illus., 1968.

269-306 **Wright, J. B.** South Atlantic continental drift and the Benue Trough: Tectonophysics, v. 6, no. 4, p. 301-310, illus., 1968.

Wright, Phillip M. See *Costain, John K. 274-274*

Wright, T. L. See *Decker, R. W. 270-449*

264-253 **Wrobel, Bernhard.** Uber die numerische Berechnung gravimetrischer Lotabweichungs-Differenzen und ihre Genauigkeit [On the numerical calculation of gravimetric plumbline deflection differences and their accuracy]: Bonn, Rheinische Friedrich-Wilhelms-Univ., 161 p., illus., tables, 1967.

268-172 **Wu, Francis T.** The inverse problem of magnetotelluric sounding: Geophysics, v. 33, no. 6, p. 972-979, illus., tables, 1968.

Wu, M. J. See *Sherif, M. A. 268-576*

274-217 **Wuenschel, P. C.; Treitel, Sven; Flinn, E. A.; Keller, G. V.; Pickett, G. R.** Geophysical research and progress in exploration, 1965-1968: Geophysics, v. 34, no. 2, p. 145-154, 1969.

268-226 **Wunderlich, H. G.** Mediterrane Gebirgszusammenhange im Lichte der Schwerverteilung [Mediterranean mountain relationships in the light of the gravity distribution], *in* Internat. Geol. Cong., 23d, Prague, 1968, Proc., Sec. 1, Upper mantle (geological processes): Prague, Academia, p. 57-68, illus., 1968.

Wyatt, P. Y., 3d. See *Fischer, Irene. 271-168*

Wyllie, P. J. See *Lambert, I. B. 266-384*

Wyss, M. See *Scholz, C. H. 273-113*

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Yabuki, Hideo. See *Shima, Makoto. 275-049*

Yacé, Ignace. See *Vachette, Michelle. 275-017*

267-403 **Yacob, A.; Bhargava, B. N.** On 26-month periodicity in quiet-day range of geomagnetic horizontal force and in sunspot number: Jour. Atmos. and Terrest. Physics, v. 30, no. 11, p. 1907-1911, illus., 1968.

Yacob, A. See *Bhargava, B. N. 275-322*

274-163 **Yagi, Norio; Ishii, Yoshiharu.** On the relationship of the mechanical properties of soils and rocks to the velocity of elastic waves: Kyoto Univ. Disaster Prevention Research Inst. Bull., v. 18, pt. 4, p. 15-25, illus., 1969.

Yagofarova, F. Z. See *Bochkarev, V. S. 266-044*

Yagudin, S. Z. See *Sharifkulov, K. S. 269-702*

273-182 **Yahagi, Fumiya; Motojima, Isao.** Geoelectrical method for identification of faults [in Japanese with English abs.]: Butsuri-Tanko, v. 22, no. 1, p. 11-20, illus., table, 1969.

Yakovlev, A. I. See *Alekseyev, F. A. 272-481*

Yakovlev, G. Ya. See *Korennoy, Ye. P. 271-391*

265-251 **Yakovlev, I. A.; Bubnov, V. P.** O primenenii metoda naimen'shikh kvadratov dlya obrabotki materialov MTZ [On the use of the least squares method for processing magnetotelluric sounding data]: Razved. Geofizika, no. 24, p. 73-76, illus., 1967.

264-438 **Yakovlev, N. I.** Tsifrovoy ferrozondovyy magnitometr s shirotnoy modulyatsiyey [Digital ferrosonde magnetometer with width-modulation]: Geofiz. Apparatura, no. 33, p. 95-102, illus., 1967.

270-285 **Yakovlev, N. I.** Osobennosti raboty ferrosondovogo datchika v rezonansnom rezhime [Features of operation of a fluxgate pickup in the resonance regime]: Geofiz. Apparatura, no. 35, p. 27-38, illus., 1968.

265-058 **Yakovleva, S. E.** Plamenno-fotometricheskiy metod opredeleniya kaliya [Flame-photometric method of potassium determination], *in* Metodam opredeleniya absolyutnogo vozrasta mineralov i gornykh porod, 3d Seminaru, Leningrad 1967, Materialy: Leningrad, Vses. Nauchno-Issled. Geol. Inst., p. 28-33, illus., 1967.

Yakovleva, S. S. See *Gerling, E. K. 275-026*

267-450 **Yakubaylik, E. K.** O zavisimosti magnitnoy vyazkosti magnetita ot razmagnichavayushchego polya [On the dependence of magnetic viscosity of magnetite on the demagnetizing field]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 104-106, illus., 1968.

273-212 **Yakubovskiy, V. I.** Rezul'taty geofizicheskikh rabot v rayone Novonezhinskogo nefteproyavleniya [Results of geophysical work in the region of the Novonezhinsk oil showing], *in* Geologiya i perspektivy neftegazonosnosti Turgayskogo progiba: Severo-Kazakh. Geol. Upravleniye, Geol. Soveshchaniye, 1st, Turgay 1962, Materialy, p. 10-13, 1964.

264-177 **Yakupov, V. S.** Opredeleniye tipa geoelektricheskogo razreza merzlykh tolshch s pomoshch'yu EVM [Determination of the type of geoelectrical section of frozen beds using a computer]: Razved. i Okhrana Nedr, no. 5, p. 31-35, table, 1968.

Yakupov, V. S. See *Kirillov, V. A. 268-185*

269-249 **Yakupov, V. S.** Udel'noye elektricheskoye soprotivleniye merzlykh porod kak funktsiya ikh litologicheskogo sostava [Specific electrical resistivity of frozen rocks as a function of their lithologic composition *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 243-247, illus., 1968.

268-599 **Yakushev, V. P.; Shreyner, L. A.** Prochnost' karkasa poristykh kvartsevykh peschanykh kollektorov nefti i gaza v usloviyakh vsestoronnego szhatiya [The strength of the skeleton of porous quartz sandy oil and gas reservoirs under conditions of confining pressure], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 208-211, illus., table, 1968.

Yale, F. G. See *Hartmann, W. K. 268-065*

Yale, Francis G. See *Hartmann, William K. 268-075*

270-425 **Yalymov, N. G.** Vliyaniye intensivnosti ochistnoy vyyemki na ustoychivost' obnazheniy [Effect of the intensity of mucking out of excavations on the stability of the exposed surfaces], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh

porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 89-92, 1967.

270-427 **Yalymov, N. G.** Rabota shtangovoy krepi v slabykh porodakh [Operation of roof bolting in weak rocks], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 103-115, tables, 1967.

Yamaguchi, Masaru. See *Matsumoto, Tatsuro. 273-017*

Yamaguti, Masaru. See *Minakami, Takeshi. 271-562*

271-078 **Yamaguti, Seiti.** On the changes in the heights of yearly mean sea levels in recent years [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 901-906, illus., tables, 1968.

268-110 **Yamakawa, Norio.** Foreshocks, aftershocks, and earthquake swarms with special reference to normal seismic activity in and near the Japanese Islands, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 51-59, illus., 1968.

270-082 **Yamakawa, Norio.** Foreshocks, aftershocks, and earthquake swarms—[Pt.] 3, Detailed areal characteristics of aftershock activities: Papers Meteorology and Geophysics, v. 18, no. 2, p. 77-88, illus., tables, 1967.

275-275 **Yamamoto, Masahiro; Ogushi, Nagashi; Sakai, Hitoshi.** Distribution of sulfur isotopes, selenium and cobalt in the Yanahara ore deposits, Okayama-Ken, Japan: Geochem. Jour., v. 2, nos. 3-4, p. 137-156, illus., tables, 1968.

Yamaoka, Kazuo. See *Ueda, Yoshio. 274-021*

Yamaoka, Kazuo. See *Ueno, Hirotomo. 275-336*

265-016 **Yamasaki, Fumio; Hamada, Tatsuji; Fujiyama, Chikako.** RIKEN natural radiocarbon measurements IV: Radiocarbon, v. 10, no. 2, p. 333-345, 1968.

266-566 **Yamasaki, Masao; Nakanishi, Nobuhiro.** Volcanic history of Hakusan [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 1, p. 32-43, illus., table, 1968.

273-498 **Yamasaki, Masao; Nakanishii, Nobuhiro; Miyata, Kin'ichi.** History of Tateyama Volcano: Kanazawa Univ. Fac. Sci. Sci. Repts., v. 11, no. 1, pt. 2 (Biology, Geology), p. 73-92, illus., table, 1966.

Yamaya, Kazuhisa. See *Iwasaki, Iwaji. 266-504*

271-130 **Yamazaki, Yoshio.** Electrical conductivity of strained rocks—[Pt.] 4, Improvement of the resistivity variometer [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 4, p. 957-964, illus., 1968.

267-622 **Yambao, Benigno.** Volcanology in the Philippines, *in* Individual studies by participants to the International Institute of Seismology and Earthquake Engineering, V. 3: Tokyo, Internat. Inst. Seismology and Earthquake Eng., p. 109-115, illus., 1966.

Yamshchikov, V. S. See *Rzhevskiy, V. V. 272-164*

Yanagi, Takeru. See *Matsumoto, Tatsuro. 273-017*

Yanagisawa, Masumi. See *Shima, Etsuzo. 266-139*

Yanagisawa, Masumi. See *Shima, Etsuzo. 266-512*

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Yanovskaya, T. B. See *Kilinchuk, L. M. 266-201*

Yanovskaya, T. B. See *Ratnikova, L. I. 266-532*

271-317 **Yanovskaya, T. B.** Some data on seismic waves through the Earth's core: Jour. Physics Earth, v. 16, no. 1, p. 37-43, illus., tables, 1968.

265-643 **Yanovskiy, A. K.** Kriterii optimal'nosti fil'tratsii sluchaynykh protsessov primenitel'no k zadacham seysmorazvedki [Criteria of optimum of filtration of random processes applicable to problems of seismic surveying]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 6, p. 39-48, illus., 1968.

Yanovskiy, B. M. See *Van-Chi, Fam. 264-375*

271-350 **Yanovskiy, B. M.; Kruglyakov, A. A.** Influence of the nondipole part of the geomagnetic field on the location of virtual poles: Geomagnetism and Aeronomy, v. 8, no. 4, p. 583-587, illus., tables, 1968.

Yanovskiy, B. M. See *Lomanyy, V. D. 271-390*

Yanovskiy, I. I. See *Lerner, B. L. 271-528*

273-147 **Yanson, Z. A.** Rasprostraneniye nestatsionarnykh uprugikh voln SH v poluprostranstve s dvumya volnovodami, I [Propagation of nonstationary elastic SH waves in a half space with two wave guides, Pt. 1]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 3-18, illus., 1969.

274-164 **Yanson, Z. A.** Rasprostraneniye nestatsionarnykh uprugikh voln SH v poluprostranstve s dvumya volnovodami, II [Propagation of nonstationary elastic SH waves in a half space with two wave guides, Pt. 2]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 19-37, illus., 1969.

264-509 **Yanushevich, T. A.** Priznaki diskretnoy korrelyatsii voln, obrazuyushchikhsya na poverkhnosti Mokhorovichicha na kontinentakh [Criteria of discrete correlation of waves formed on the M-discontinuity on continents]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 67-74, illus., 1967.

Yanushevich, T. A. See *Krylov, S. V. 269-658*

Yaplee, B. S. See *Shapiro, A. 268-096*

Yardley, E. D. See *Axon, H. J. 273-092*

266-437 **Yaremenko, L. N.** Nekotoryye dannyye magnitnykh vozmushcheniyakh v ekvatorial'nykh oblastyakh Zemli [Some data on magnetic disturbances in equatorial regions of the Earth (with English summ.)]: Akad. Nauk Ukrain. SSR Mezhduvedomstv. Geofiz. Kom. Inf. Byull., Geofizika i Astronomiya, no. 11, p. 149-154, illus., table, 1967.

Yarish, M. S. See *Benderskiy, V. Ya. 269-646*

266-037 **Yaron, F.; Schulman, N.** A negative anomaly of the U-234:U-238 ratio: Israel Jour. Earth-Sci., v. 16, no. 4, p. 229-230, 1967.

267-204 **Yarosh, A. Ya.** Stroyeniye kristallicheskogo fundamenta vostochnykh rayonov Russkoy platformy i yego strukturnyye svyazi s Uralom [Structure of the crystalline basement of the eastern regions of the Russian platform and its structural relationships with the Urals], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po

Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka", p. 122-133, illus., 1968.

267-283 **Yarosh, A. Ya.** K voprosu metodiki geologicheskogo istolkovaniya gravitatsionnykh i magnitnykh anomaliy pri izuchenii Urala i vostoka Russkoy platformy [On the problem of the procedure of geologic interpretation of gravity and magnetic anomalies in studying the Urals and eastern Russian platform], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory i Verkhney Mantii, 1st, Trudy: Moscow, Izdatel'stvo "Nauka," p. 153-162, illus., 1968.

269-342 **Yarosh, A. Ya.; Polyakov, A. B.** Poiski glubokozalegayushchikh rudnykh tel gravitatsionnym metodom [Prospecting for deep-seated ore bodies by the gravity method (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 231-234, illus., 1968.

271-102 **Yaroshenya, R. A.** Ob osobennostyakh rasprostraneniya voln tsunami (na primere Kurilo-Kamchatskoy zony) [On the features of propagation of tsunami waves (illustrated by the Kurile-Kamchatka zone)], *in* Problema tsunami: Moscow, Akad. Nauk SSSR Otdeleniye Nauk o Zemli, Sovet po Seysmologii, p. 180-183, illus., table, 1968.

271-153 **Yaroshevich, M. I.; Mansurova, N. D.** 180-sekundnyy gal'vanometr [A 180-second galvanometer]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 77-80, illus., 1968.

Yashchenko, M. L. See *Gerling, E. K. 267-039*

273-049 **Yasinskaya, A. A.; Makarov, V. A.** Nekotoryye aspekty issledovaniya rel'yefa chastits nikelistogo zheleza meteorita Sikhote-Alinskiy [Some aspects of investigation of the relief of nickel-iron particles from the Sikhote-Alin meteorite (with English summ.)]: Mineralog. Sbornik, no. 21, issue 4, p. 395-396, 1967.

Yaskevich, V. I. See *Dashkevich, N. N. 269-340*

265-418 **Yasuhara, Michihiro.** A method for the analysis of geomagnetic variation field and its application to the year-to-year change of Sq activity: Kyoto Univ. Geophys. Inst. Spec. Contr., no. 7, p. 29-37, illus., tables, 1967.

268-292 **Yasui, Masashi; Kishii, Toshiro; Watanabe, Teruhiko; Uyeda, Seiya.** Heat flow in the Sea of Japan, *in* The crust and upper mantle of the Pacific area—Internat. Upper Mantle Proj. Sci. Rept. 15: Am. Geophys. Union Geophys. Mon. 12 (NAS-NRC Pub. 1687), p. 3-16, illus., tables, 1968.

Yasui, Masashi. See *Uyeda, Seiya. 270-232*

267-122 **Yasui, Y.** A study of earthquakes felt on southern Shikoku—The accuracy of epicenter determination from a single station observation on southern Shikoku [in Japanese with English abs.]: Quart. Jour. Seismology, v. 31, nos. 3-4, p. 67-80, illus., tables, 1968.

273-130 **Yasui, Y.** A study on the luminous phenomena accompanied with earthquake, Pt. 1 [in Japanese with English abs.]: Kakioka Magnetic Observatory Mem., v. 13, no. 1, p. 25-61, illus., tables, 1968.

Yasukawa, Katsumi. See *Abe, Etsuo. 274-269*

271-039 **Yates, Ann M.; Tackett, Stanford L.; Moore, Carleton B.** Chromium and manganese in chondrites: Chem. Geology, v. 3, no. 4, p. 313-322, illus., tables, 1968.

269-010 **Yates, Robert G.; Engels, Joan C.** Potassium-argon ages of some igneous rocks in northern Stevens County, Washington, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D242-D247, illus., table, 1968.

272-068 **Yavnel', A. A.** Trinadtsataya meteoritnaya konferentsiya [Thirteenth meteorite conference]: Priroda, no. 1, p. 108-110, illus., 1968.

264-510 **Ye. D.; Padurets, G. S.** Izucheniye glubinnogo stroyeniya regionov s ispol'zovaniyem posleduyushchikh zapisey na seysmogrammakh regional'nykh issledovaniy KMPV [Study of the deep structure of regions using subsequent traces on the seismograms of regional refraction investigations]: Prikladnaya Geofizika, no. 51, p. 80-87, illus., 1968.

266-287 **Yeats, Robert S.** Rifting and rafting in the southern California borderland, *in* Conference on geologic problems of San Andreas fault system, Stanford, Calif., 1967, Proc.: Stanford Univ. Pubs. Geol. Sci., v. 11, p. 307-320, illus.; discussion, p. 320-322, 1968.

267-212 **Yeats, Robert S.** Southern California structure, sea-floor spreading, history of the Pacific Basin: Geol. Soc. America Bull., v. 79, no. 12, p. 1693-1702, illus., 1968.

Yefimkina, S. S. See *Blokhin, P. A. 269-637*

Yefimov, I. A. See *Naydenov, B. M. 272-288*

Yefstifeyev, V. I. See *Petrov, L. V. 270-390*

274-442 **Yegorkin, A. V.; Matushkin, B. A.** Stroyeniye zemnoy kory na Kavkaze i v zapadnoy chasti Sredney Azii po dannym geofizicheskikh issledovaniy [Crustal structure in the Caucasus and in the western part of Central Asia according to data of geophysical investigations]: Akad. Nauk SSSR Izv. Ser. Geol., no. 5, p. 5-16, illus., 1969,

264-143 **Yegorkina, G. V.** Izucheniye skorostnykh parametrov sredy po materialov, poluchennym s pomoshch'yu stantsii "Zemlya" [Study of the velocity parameters of a medium on the basis of data obtained using a "Zemlya" station]: Prikladnaya Geofizika, no. 51, p. 68-79, illus., 1968.

Yegorov, D. B. See *Apel'tsin, F. R. 267-038*

265-243 **Yegorov, M. N.** A method of eliminating the influence of topography in the alternating-current charge method [translation from Russian]: Springfield, Va., Clearinghouse for Federal Sci. and Tech. Inf., JPRS 30,164, 12 p., illus., 1965; originally published in Leningrad Univ. Vestnik, Ser. Geologiya i Geografiya, v. 6, no. 1, p. 64-72, 1965.

267-185 **Yegorov, V. A.** Opyt ispol'zovaniya poley radiostantsiy pri geologicheskom kartirovanii [Attempt to use the fields of radio stations in geologic mapping]: Leningrad. Univ. Vestnik, Ser. Geologiya i Geografiya; no. 6, issue 1, p. 79-84, illus., 1968.

264-144 **Yegorov, Yu. M.; Osinskaya, S. V.** Kasseta dlya mnogodorozhechnoy zapisi [A cassette for multipath recording]: Geofiz. Apparatura, no. 33, p. 179-184, illus., 1967.

267-174 **Yegorov, Yu. M.; Mar'yashina, D. A.; Chernozemova, V. G.** Voprosy razrabotki i primeneniya magnitnykh datchikov s zhidkostnym dempfirovaniyem [Problems of the development and application of magnetic sensors with fluid damping]: Razved. Geofizika, no. 26, p. 51-55, illus., 1968.

267-178 **Yegorov, Yu. M.** Razrabotka i konstruirovaniya shirokopolosnykh magnitostaticheskikh magnitometrov [Development and construction of broadband magnetostatic magnetometers]: Geofiz. Apparatura, no. 34, p. 88-93, illus., 1967.

Yegorov, Yu. M. See *Alekseyev, A. M. 270-143*

270-144 **Yegorov, Yu. M.; Knyazev, V. P.** Yustirovka Z-magnitometra [Adjustment of the Z-magnetometer]: Geofiz. Apparatura, no. 35, p. 154-157, illus., 1968.

Yegorova, N. D. See *Makarevich, K. G. 275-220*

Yekhanin, Ye. V. See *Ben'ko, Ye. I. 264-516*

Yeliseyeva, I. S. See *Lishnevskiy, E. N. 270-218*

270-171 **Yemel'yanov, G. S.** Staticheskaya sistema stabilizatsii skorosti vrashcheniya elektroprovoda barabana magnitnoy zapisi [A static system of stabilizing the speed of rotation of the driving mechanism of the drum in magnetic recording]: Geofiz. Apparatura, no. 35, p. 137-141, illus., 1968.

270-398 **Yemel'yanov, G. S.** Ustroystvo vvoda staticheskikh popravok [Device for introducing static corrections]: Geofiz. Apparatura, no. 36, p. 129-131, illus., 1968.

270-399 **Yemel'yanov, G. S.** Elektronnyy kommutator [An electronic commutator]: Geofiz. Apparatura, no. 36, p. 132-133, illus., 1968.

267-474 **Yemel'yanov, Yu. N.** Sostavlyayushchiye e.d.s. vibropomekhi v magnitopriyemnikakh [Emf components of vibrational noise in magnetic pickups]: Geofiz. Apparatura, no. 34, p. 119-127, illus., 1967.

271-144 **Yen, T. P.** Crustal features of the Taiwan region: Geol. Soc. China Proc., no. 11, p. 130-136, illus., table, 1968.

Yenikeyeva, F. Kh. See *Dyadkin, I. G. 268-638*

Yenikeyeva, F. Kh. See *Dyad'kin, I. G. 275-438*

275-440 **Yentsov, I. I.** K perspektivam neftegazonosnosti vizeyskoy karbonatnoy tolshchi Permskogo Prikam'ya [On the oil and gas prospects of the Visean carbonate series of the Kama region of Perm]: Geologiya Nefti i Gaza, no. 3, p. 28-31, illus., 1969.

274-440 **Yepinat'yeva, A. M.** O refragirovannykh i otrazhennykh voln v zemnoy kore [On refringent and reflected waves in the Earth's crust]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 3, p. 38-52, illus., 1969.

275-291 **Yeremenko, N. A.; Pankina, R. G.** Izmeneniye izotopnogo sostava sery v neftyakh i gazakh v zavisimosti ot vozrasta vmeshchayushchikh otlozheniy [Variation of the isotopic composition of sulfur in petroleums and gases as a function of age of the enclosing formations], *in* Khimiya Zemnoy Kory—Geokhimicheskaya konferentsiya posvyashchennoy stoletiyu so dnya rozhdeniya akademika V. I. Vernadskogo, Trudy, V. 1: Moscow, Akad. Nauk SSSR Inst. Geokhimii i Analit. Khimii, p. 424-431, illus., tables, 1963.

271-276 **Yeremeyev, V. F.; Yurkina, M. I.** Evaluation of nonlinear terms in Molodensky's equation for disturbing potential: Bull. Geod., no. 89, p. 325-331, 1968.

273-225 **Yeremeyev, V. F.; Yurkina, M. I.** On orientation of the reference geodetic ellipsoid: Bull. Geod., no. 91, p. 13-15, 1969.

274-415 **Yeremin, N. M.** Yestestvennaya radioaktivnost' oazisa Shirmakhera [Natural radioactivity of the Schirmacher Oasis]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 55, p. 37-39, tables, 1965.

Yermilova, L. P. See *Chukhrov, F. V. 268-361*

Yermilova, L. P. See *Chukhrov, F. V. 275-282*

267-420 **Yeroshenko, Ye. G.** Topology of the high-latitude nighttime magnetosphere: Geomagnetism and Aeronomy, v. 8, no. 2, p. 161-165, illus., 1968.

Yerozolimskiy, B. G. See *Voytsik, L. R. 272-555*

Yerozolimskiy, B. G. See *Voytsik, L. R. 272-556*

270-339 **Yershov, I. A.** Kolebaniya osnovaniya i tela plotiny pri korotko-periodnykh mikroseysm [Vibrations of the foundation and body of a dam in short-period microseisms], *in* Kolebaniya zemlyanykh plotin: Akad. Nauk SSSR Inst. Fiziki Zemli, Voprosy Inzh. Seysmologii, no. 11, p. 20-43, illus., tables, 1967.

Yershov, V. M. See *Timofeyev, A. N. 268-273*

268-362 **Yershov, V. M.** K interpretatsiya izotopnogo sostava svintsa kolchedannykh mestorozhdeniy Urala v svyazi s nekotorymi voprosami genezisa [On the interpretation of the isotopic composition of lead from the pyrite deposits of the Urals in connection with some problems of genesis], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 71-76, illus., table, 1967.

Yershova, A. P. See *Korsakov, O. D. 267-201*

269-272 **Yesenov, Sh. Ye.; Bekzhanov, G. R.; Kolmogorov, Yu. A.; Kuvshinov, G. V.; Kunin, N. Ya.; Stroiteleva, A. V.; Yumanov, B. R.; Yumanova, T. V.** Glubinnoye stroyeniye Uspenskoy zony v Tsentral'nom Kazakhstane po geofizicheskim dannym [Deep structure of the Uspenskaya zone in Central Kazakhstan according to geophysical data (with English summ.)], *in* Internat. Geol. Cong., 23d, Prague, 1968, Doklady Sovet. Geologov, Prob. 5, Geologicheskiye Rezul'taty Prikladnoy Geofiziki: Moscow, Izdatel'stvo "Nauka," p. 92-96, illus., 1968.

267-186 **Yeskin, F. I.** Nekotoryye rezul'taty izmereniy yestestvennogo elektricheskogo polya v more [Some results of measurements of the natural electrical field in the sea]: Leningrad. Univ. Vestnik, Ser. Geologiya i Geografiya, no. 6, issue 1, p. 121-132, illus., table, 1968.

Yevdokimov, Yu. S. See *Budanov, V. G. 267-269*

Yevdokimova, T. I. See *Ostistyy, B. K. 275-177*

269-345 **Yevgrafov, N. S.** Opredeleniye plotnosti poverkhnostnykh otlozheniy po gravimetricheskim nablyudeniyam [Determination of the density of surface formations on the basis of gravimetric observations], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 174-178, illus., table, 1966.

269-346 **Yevgrafov, N. S.** K metodike vychisleniya popravki za smeshcheniye nul'-punkta gravimetrov [On a procedure for calculating the correction for zero-point displacement of gravimeters], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 196-201, illus., table, 1966.

269-476 **Yevgrafov, N. S.** Glubinnoye stroyeniye kristallicheskogo fundamenta severnoy vershiny Tatarskogo svoda po dannym interpretatsii anomaliy geomagnitnogo polya [Deep structure of the crystalline basement of the northern crest of the Tatar arch according to data of interpretation of the geomagnetic field anomalies], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 170-173, illus., 1966.

Yevko, N. D. See *Sakhibgareyev, R. S. 265-681*

269-161 **Yevsikov, N. N.** Nekotoryye zakonomernosti v raspredelenii pokazatelya tsveta po lunnoy poverkhnosti [Some regularities in the distribution of a color index on the lunar surface (with English summ.)]: Astron. Zhur., v. 45, no. 5, p. 1106-1109, illus., 1968.

Yevtushenko, V. F. See *Arm, Ye. M. 264-582*

Yew, K. Y. See *Koo, J. H. 274-379*

Yew, Kong Yul. See *Kim, Chong Su. 267-262*

264-579 **Yezhov, V. S.; Kulichenko, L. N.** Formiruyushcheye ustroystvo s millivol’tovym porogom zapuska [A pulse shaper with millivolt starter cutoff]: Geofiz. Apparatura no. 33, p. 177-178, illus., 1967.

267-308 **Yezhov, Yu. A.** Osnovnyye cherty geotermii Urala i sopredel’nykh territoriy [Main geothermal features of the Urals and adjacent territories], *in* Glubinnoye stroyeniye Urala—Ural. Sess. Nauch. Soveta po Kompleks. Issled. Zemnoy Kory Verkhney Mantii, 1st, Trudy: Moscow, Izdatel’stvo “Nauka,” p. 314-323, illus. 1968.

272-277 **Yiou, F.; Seide, C.; Bernas, R.** Formation cross sections of lithium, beryllium, and boron isotopes produced by the spallation of oxygen by high-energy protons: Jour Geophys. Research, v. 74, no. 9, p. 2447-2448, table, 1969.

Yokota, Yuji. See *Hara, Ikuo. 273-485*

Yokoyama, H. See *Hamaguchi, H. 273-045*

Yokoyama, Hidekichi. See *Kunori, Shoichi. 265-235*

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York, D. See *Purdy, J. W. 273-024*

272-015 **York, Derek.** Least squares fitting of a straight line with correlated errors: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 320-324, illus., 1969.

273-008 **York, Derek.** Least squares fitting of a straight line with correlated errors: Earth and Planetary Sci. Letters, v. 5, no. 5, p. 320-324, illus., 1969.

264-257 **Yoshibumi, Tomoda; Segawa, Jiro.** Measurement of gravity and total magneti force in the sea near and around Japan (1966): Tokyo Univ. Ocean Research Inst Collected Reprints 1967, p. 92-99, 1968; reprinted from Geod. Soc. Japan Jour., no 12, p. 157-164, illus., 1967.

265-637 **Yoshida, Hisatoshi.** Interpretation of the velocity in the bed rock obtained b refraction time-distance curves—Vertical distribution of the velocity [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 5, p. 184-197, illus., 1967.

275-365 **Yoshida, Hisatoshi.** Seismic prospecting at the Sambor damsite of the Mekon River [in Japanese with English aabs.]: Butsuri-Tanko, v. 21, nos. 5-6, p. 310-315, il lus., 1968.

Yoshida, M. See *Iwasaki, I. 268-317*

Yoshida, Minoru. See *Iwasaki, Iwaji. 266-504*

Yoshida, Mitsuo. See *Kaminuma, Katsutada. 275-111*

275-366 **Yoshida, Yoshio.** Echo-sounding of ice-covered waters from surface of ice [wit Japanese abs.]: Antarctic Rec., no. 34, p. 14-22, illus., 1969.

275-432 **Yoshidome, Michiya; Seino, Masaaki.** A study on air vibration caused by volcani explosions [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 1 no. 3, p. 141-149, illus., table, 1968.

Yoshii, T. See *Den, N. 271-505*

Yoshino, Toshio. See *Rikitake, Tsuneji. 264-352*

264-108 **Yoshiyama, Ryoichi.** Maximum amplitude and epicentral distance—[Pt.] 2, Approach to source spectrum of earthquakes [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 1, p. 25-39, illus., table, 1968.

271-079 **Yoshiyama, Ryoichi.** Note on the second derivative of time-distance curve [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 5, p. 993-1000, 1968.

266-136 **Yoshizawa, Shizuyo; Tanaka, Teiji; Kanai, Kiyoshi.** Some features of strong underground earthquake motions computed from observed surface records [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 3, p. 667-686, illus., table, 1968.

Yoshizawa, Shizuyo. See *Kanai, Kiyoshi. 266-140*

265-231 **Yoshizumi, Eizaburo; Irie, Tsuneji.** Variation of resistivity curves due to electrode configurations [in Japanese with English abs.]: Butsuri-Tanko, v. 20, no. 5, p. 208-212, illus., 1967.

265-232 **Yoshizumi, Eizaburo; Irie, Tsuneji.** Standard curves in induced polarization method—Standard curves in mountain and valley: Butsuri-Tanko, v. 20, no. 6, p. 235-245, illus., 1967.

269-664 **Youash, Younathan.** Tension tests on layered rocks: Geol. Soc. America Bull., v. 80, no. 2, p. 303-306, illus., table, 1969.

264-078 **Young, A. T.** An upper limit to the surface pressure of Venus: Icarus, v. 9, no. 1, p. 74-81, illus., 1968.

Yudakova, L. M. See *Savarenskiy, Ye. F. 274-290*

Yudin, G. T. See *Kholin, A. I. 273-220*

264-055 **Yudin, I. A.** Meteorit Severnyy Kolchim [The Severnyy Kolchim meteorite]: Priroda, no. 4, p. 85-86, illus., 1968.

Yudin, M. N. See *Van'yan, L. L. 268-188*

272-092 **Yuen, P. C.; Weaver, P. F.; Suzuki, R. K.; Furumoto, A. S.** Continuous, traveling coupling between seismic waves and the ionosphere evident in May 1968 Japan earthquake data: Jour. Geophys. Research, v. 74, no. 9, p. 2256-2264, illus., 1969.

Yuferov, Yu. K. See *Mirchink, M. F. 275-372*

Yugeta, Hideo. See *Ishii, Fumio. 272-508*

271-550 **Yuhara, Kozo.** Quantitative estimation of hydrothermal system of Owakudani and Sounzan geothermal areas, Hakone Volcano [in Japanese with English abs.]: Volcanol. Soc. Japan Bull., ser. 2, v. 13, no. 2, p. 74-83, illus., tables, 1968.

Yukina, L. V. See *Lavrukhina, A. K. 267-066*

264-119 **Yukutake, Takesi.** Geomagnetic variation associated with the Niigata earthquake, June 16, 1964, *in* General report on the Niigata earthquake of 1964 (Hirosi Kawasumi, editor): Tokyo, Japan, Tokyo Electrical Engineering College Press, p. 141-147, illus., 1968.

266-432 **Yukutake, Takesi.** Synthesis of the non-dipole components of the Earth's magnetic field from spherical harmonic coefficients [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46, pt. 2, p. 385-403, illus., tables, 1968.

271-340 **Yukutake, Takesi; Tachinaka, Hiroko.** The non-dipole part of the Earth's magnetic field [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull., v. 46 pt. 5, p. 1027-1074, illus., tables, 1968.

271-341 **Yukutake, Takesi; Tachinaka, Hiroko.** The westward drift of the geomagneti secular variation [with Japanese abs.]: Tokyo Univ. Earthquake Research Inst. Bull v. 46, pt. 5, p. 1075-1102, illus., tables, 1968.

Yumanov, B. R. See *Yesenov, Sh. Ye. 269-272*

Yumanova, T. V. See *Yesenov, Sh. Ye. 269-272*

266-302 **Yumi, Shigeru; Wako, Yasujiro.** On the secular motion of the mean pole [wit French abs.], *in* Continental drift, secular motion of the pole, and rotation of th Earth—Internat. Astron. Union, Symposium No. 32, Stresa, Italy, 1967: Dordrecht Holland, R. Reidel Publishing Co., and New York, Springer-Verlag, p. 33-36, illus 1968.

264-272 **Yun'kov, A. A.; Fedorova, N. A.** O poiskakh gorizontal'no vytyanutnykh voz mushchayushchikh tel s pomoshch'yu gravitatsionnykh anomaliy v gornyk vyrabotakh [On prospecting for horizontally extended disturbing bodies using gravit anomalies in mine workings (with English summ.)]: Akad. Nauk Ukrain. SSR Geofiz Sbornik, no. 23, p. 5-15, illus., tables, 1968.

274-272 **Yun'kov, Ya. A.; Naugol'nikov, V. B.; Kopnin, M. V.** Pro glybynu zanurenny Kryvoriz'koho synklinoriya za heofizychnymy danymy [On the depth of subsidenc of the Krivoy Rog synclinorium according to geophysical data (with Englis summ.)]: Akad. Nauk Ukrayin. RSR Dopovidi, ser. B, no. 1, p. 16-18, illus., 1969.

Yunov, A. Yu. See *Romanov, B. S. 269-268*

Yunov, A. Yu. See *Korsakov, O. D. 269-650*

268-561 **Yunusov, N. K.** Primeneniye metoda skvazhinnoy seysmorazvedki pri poiskak massivov v Predural'skom progibe [Use of the method of seismic borehole surveyin in prospecting the massifs of the Cisural depression]: Prikladnaya Geofizika, no. 5 p. 85-98, illus., 1968.

Yurchuk, I. M. See *Frolovich, G. M. 269-657*

Yurkevich, O. I. See *Savarenskiy, Ye. F. 274-290*

Yurkina, M. I. See *Yeremeyev, V. F. 271-276*

Yurkina, M. I. See *Yeremeyev, V. F. 273-225*

265-656 **Yurkova, L. A.** K voprosu ispol'zovaniya osnovnogo geofizicheskogo obor dovaniya pri geofizicheskoy razvedke [On the problem of the utilization of geophys cal equipment in geophysical surveying]: Razved. Geofizika, no. 24, p. 92-96, table 1967.

Yurkova, L. A. See *Zil'bershteyn, S. I. 266-346*

Yushinskaya, Z. N. See *Volkov, E. V. 269-700*

265-431 **Zaalishvili, I. M.** O nekotorykh osobennostyakh sutochnogo khoda magnitn aktivnosti v srednikh shirotakh [On some features of the diurnal course of magnet activity in middle latitudes]: Akad. Nauk Gruzin. SSR Inst. Geofiziki Trudy, v. 2 no. 1, p. 44-51, illus., table, 1966.

Zabarinskiy, P. P. See *Buyalov, N. I. 269-287*

272-042 **Zabiyaka, I. D.; Makhlayev, L. V.** O prirode aktsessornykh tsirkona i monatsit granitoidakh v svyazi s interpretatsiyey opredeleniy absolyutnogo vozrasta [On t nature of accessory zircon and monazite in granitoids in connection with the interpretations of absolute age determinations]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 123-127, illus., 1968.

Zablocki, Charles J. See *Gott, Garland B. 267-195*

267-183 **Zaborovskiy, A. I.; Semenova, S. G.; Frolov, A. D.** Nekotoryye voprosy metodiki laboratornogo izucheniya chastotnoy dispersii elektricheskikh svoystv gornykh porod v peremennykh elektromagnitnykh polyakh [Some problems of procedure of laboratory study of the frequency dispersion of the electrical properties of rocks in alternating electromagnetic fields]: Vyssh. Ucheb. Zavedeniy Izv., Geologiya i Razved., no. 9, p. 110-118, illus., tables, 1968.

273-196 **Zaborovskiy, A. I.; Semenova, S. G.; Frolov, A. D.** Elektroprovodimost' vlazhnykh kvartsevykh peskov v peremennom elektromagnitnom pole v diapazone chastot 6.10^4-6.10^6 gerts [Electrical conductivity of moist quartz sands in an alternating electromagnetic field in the frequency range 6$10^4-6$10^6 hz]: Moskov, . Univ. Vestnik, ser. 4, no. 4, p. 72-77, illus., 1968.

273-218 **Zadro, M. Bozzi.** Filtri multidimensionali e loro applicazioni geofisiche [Multidimensional filters and their geophysical applications (with English summ.)]: Annali Geofisica, v. 21, no. 3, p. 287-304, illus., 1968.

264-357 **Zagulyayeva, V. A.; Martynova, K. V.; Prilezhayeva, N. A.; Fatkullin, M. N.** Lunar-diurnal geomagnetic field variations at Ibadan and their relation to ionospheric tides: Geomagnetism and Aeronomy, v. 7, no. 6, p. 813-817, illus., tables, 1967.

270-108 **Zaitzeff, James B.; Sherman, John W., 3d.** Oceanographic applications of remote sensing, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 497-527, illus., 1968.

Zaitzeva, S. A. See *Pudovkin, M. I. 268-382*

Zak, Israel. See *Freund, Raphael. 267-217*

268-648 **Zakharchenko, V. F.** K metodike interpretatsiya neytronnykh izmereniy v sredakh s vklyucheniyami [On the procedure of interpretation of neutron measurements in mediums with inclusions], *in* Yaderno-geofizicheskiye issledovaniya: Akad. Nauk SSSR Ural. Filial, Inst. Geofiziki Trudy, Geofiz. Sbornik, no. 6, p. 3-11, illus., tables, 1967.

273-189 **Zakharov, Ye. V.** K difraktsii ploskogo elektromagnitnogo polya na odnorodnom tsilindricheskom tele, pogruzhennom v sloistuyu sredu [On the diffraction of a plane electromagnetic field on a uniform cylindrical body buried in a layered medium]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 57-62, 1969.

273-155 **Zakharyan, Zh. V.** Rezul'taty dinamicheskikh izpytaniy modeli krupnopanel'nogo zdaniya [Results of dynamic testing of a model of a prefabricated building], *in* Soveshchaniye po problemam modelirovaniya stroitel'nykh konstruktsii na seysmicheskiye vozdeystviya, Leninakan, 1965 [Materialy]: Yerevan, Akad. Nauk Armyan. SSR, p. 44-50, illus., tables, 1968.

Zakutskiy, S. N. See *Tarkhov, A. P. 272-272*

274-494 **Zalazayeva, L. V.; Leont'yev, Ye. I.** Ispol'zovaniye elektricheskikh parametrov dlya otsenki poristosti i neftegazononasyshchennosti produktivnykh plastov tsentral'noy chasti Zapadno-Sibirskoy nizmennosti [Use of electrical parameters for the estimation of porosity and oil and gas saturation of the producing formations in the central part of the West Siberian Lowland]: Geologiya Nefti i Gaza, no. 10, p. 55-58, illus., table, 1967; German version in Zeitschr. Angew. Geologie, v. 15, no. 2, p. 75-77, 1969.

Zalesskiy, B. V. See *Afanas'yev, G. D. 268-156*

Zamyatin, N. I. See *Fomichev, V. I. 272-289*

274-308 **Zamyatin, N. I.; Mitryayeva, N. M.** Izotopnyy sostav sery sul'fidov i barit mestorozhdeniya Zhayrem (Tsentral'nyy Kazakhstan) [Isotopic composition of th sulfur of sulfides and barite in the Zhayrem deposit (Central Kazakhstan)]: Akad Nauk Kazakh. SSR Izv. Ser. Geol., no. 1, p. 55-62, illus., table, 1969.

265-306 **Zander, V. N.; Tomeshunas, Yu. I.; Berkovskiy, A. N.; Suvorova, L. V.; Dedeyev V. A.; Kratts, K. O.** Geologicheskoye stroyeniye fundamenta Russkoy plity [Geologic structure of the basement of the Russian plate]: Leningrad, Izdatel'stvo "Nedra, 124 p., illus., tables, 1967.

Zanella, A. H. See *Walker, J. W. 267-158*

269-314 **Zapletal, K.** Tektogene der Erde [Tectogens of the Earth], *in* Internat. Geol Cong., 23d, Prague, 1968, Proc., Sec. 3, Orogenic belts: Prague, Academia, p. 213 224, 1968.

Zapol'skaya, G. V. See *Sokolovskiy, K. I. 267-268*

272-482 **Zaporozhets, V. M.; Kedrov, A. I.** Issledovaniye gornykh porod metodom aktivatsii yader kisloroda neytronami s energiyey 14 Mev [Investigation of rocks by th method of activation of oxygen nuclei by neutrons with energies of 14 Mev], *i* Yadernaya geofizika: Vses. Nauchno-Issled. Inst. Yadernoy Geofiziki i Geokhimii Trudy, no. 1, p. 182-192, illus., table, 1968.

Zaritskiy, P. V. See *Vinogradov, V. I. 265-376*

267-343 **Zartman, R. E.** Isotopic composition of lead, *in* Reconnaissance geology geophysics, and geochemistry of the southeastern part of the Lewis and Clark Range Montana: U.S. Geol. Survey Bull. 1252-E, p. E31-E32, table, 1968l

Zartman, R. E. See *Stacey, J. S. 271-325*

267-577 **Zarudzki, E. F. K.; Uchupi, Elazar.** Organic reef alignments on the continenta margin south of Cape Hatteras: Geol. Soc. America Bull., v. 79, no. 12, p. 1867 1870, illus., 1968.

Zaslavskaya, N. I. See *Florenskiy, K. P. 267-069*

267-117 **Zátopek, A.** The Skopje earthquake of 26 July 1963 and the seismicity Macedonia, *in* The Skopje earthquake 1963: Amsterdam, Netherlands, UNESCO, 89-129, illus., tables, 1968.

268-129 **Zátopek, A.** The Skopje earthquake of 26 July 1963 and the seismicity Macedonia, *in* Proceedings of the International Seminar on Earthquake Engineerin Skopje, Yugoslavia, 1964: Paris, UNESCO, p. 77-80, 1968.

Zátopek, A. See *Ambraseys, N. N. 274-081*

271-058 **Zátopek, Alois.** European Seismological Commission. Subcommission for t Carpathian and Balkan Regions—Progress report 1966-1968: Československ Akad. Věd Studia Geophys. et Geod., v. 13, no. 1, p. 100-103, illus., 1969.

272-183 **Zátopek, Alois.** Half a century of development of geodesy, geophysics, a meteorology in Czechoslovakia: Ceskoslovenska Akad. Ved Studia Geophys. Geod., v. 12, no. 4, p. 333-338, 1968.

Zatsepin, Ye. N. See *Gaponenko, G. I. 273-302*

275-379 **Zavalishin, B. R.** Opredeleniye effektivnykh skorostey pri glubinny seysmicheskikh issledovaniyakh MRNP [Determination of the effective velocities deep seismic investigations by the controlled direction pickup procedure]: N tegazovaya Geologiya i Geofizika, no. 2, p. 34-37, illus., 1969.

Zavel’skiy, F. S. See *Cherdyntsev, V. V. 265-024*

Zavel’skiy, F. S. See *Cherdyntsev, V. V. 267-036*

Zavel’skiy, F. S. See *Kind, N. V. 272-038*

266-321 **Zavgorodskiy, O. M.** Opyt eksperimental’nogo issledovaniya mekhanizma obrazovaniya struktur fundamenta Minusinskogo progibe i yego obramleniya [Attempt at experimental investigation of the mechanism of formation of the structure of the basement of the Minusinsk depression and its framework]: Akad. Nauk SSSR Doklady, v. 181, no. 4, p. 934-937, illus., 1968.

271-374 **Zavoyskiy, V. N.** Hīdroreostat dlya rozmahnīchuvannya zrazkīv hīrs’kykh porīd zmīnnym mahnītnom polem [A hydrorheostat for demagnitizing rock samples by an a-c magnetic field (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 6, p. 526-529, illus., 1968.

271-375 **Zavoyskiy, V. N.** Pro rol’ īdeal’noyi namahnīchenostī u metodī porīvnyannya kharakterystyk stabīl’nostī [On the role of ideal magnetization in the method of comcomparing stability characteristics (with English and Russian summ.)]: Akad. Nauk Ukrayin. RSR Dopovīdī, ser. B, no. 11, p. 999-1002, illus., 1968.

Zayakin, V. N. See *Puzdrovskiy, Ye. P. 264-495*

Zaytsev, A. I. See *Nenashev, N. I. 274-025*

Zaytsev, A. N. See *Fel’dshteyn, Ya. I. 265-406*

274-342 **Zaytsev, A. N.** Variability of Sq variations: Geomagnetism and Aeronomy, v. 8, no. 6, p. 905-906, illus., 1968.

274-344 **Zaytsev, A. N.; Fel’dshteyn, Ya. I.** Reference field level in the computation of Sq variations: Geomagnetism and Aeronomy, v. 8, no. 6, p. 908-910, illus., 1968.

Zaytseva, S. A. See *Belyakova, S. I. 271-347*

273-364 **Zaytseva, S. A.; Pudovkin, M. I.; Shumilov, O. I.** Polar storms and the development of DR-current: Geomagnetism and Aeronomy, v. 8, no. 5, p. 724-727, illus., 1968.

268-565 **Zdorovenin, V. V.; Pudov, V. D.; Sorokhtin, O. G.** Opyt ispol’zovaniya ETsVM “Minsk-2” dlya obrabotki seysmicheskom informatsii [Attempt to use the Minsk-2 computer for processing seismic information (with English summ.)]: Okeanologiya, v. 8, no. 5, p. 927-929, illus., 1968.

268-038 **Žebera, Karel.** Moldavite-bearing sediments between Koroseky and Holkov in South Bohemia [with Czech abs.]: [Czechoslovakia] Ústřed. Ústav. Geol. Vestnik, v. 42, no. 5, p. 327-337, illus., table, 1967.

264-571 **Zefirov, N. N.; Keyvsar, Z. I.** O predelakh primenimosti priblizhennykh paletok dlya interpretatsii rezul’tatov induktsionnogo karotazha [On the limits of applicability of approximate master-curves in interpreting the results of induction logging]: Prikladnaya Geofizika, no. 50, p. 182-188, illus., 1967.

269-322 **Zegebart, D. K.** Nekotoryye osobennosti stroyeniye platform i obramlyayushchikh skladchatnykh struktur, yavivshiyesya sledstviyem rotatsionnogo rezhima Zemli [Some features of the structure of platforms and surrounding folded structures, as a consequence of the rotational regime of the Earth (with English summ.)]: Geotektonika, no. 6, p. 26-33, tables, 1968.

264-561 **Zelenov, K. K.** S akvalangom v kratere vulkana [Into a volcanic crater with an aqualung]: Priroda, no. 6, p. 92-96, illus., 1968.

269-055 **Zeller, E. J.; Levy, P. W.; Mattern, P. L.** Geologic dating by electron spin resonance, *in* Radioactive dating and methods of low-level counting—IAEA-ICSU Symposium, Monaco, 1967, Proc.: Vienna, Austria, Internat. Atomic Energy Agency, p. 531-540, illus., 1967.

266-017 **Zeller, Edward J.** Geologic age determination by thermoluminescence, Chap. 6.1 *in* Thermoluminescence of geological materials—NATO Advanced research Inst., Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 311-325, illus., 1968.

Zel'manchuk, V. A. See *Solov'yev, S. L. 265-174*

268-627 **Zel'tsman, P. A.** Konstruirovaniye apparatury dlya geofizicheskikh issledovaniy skvazhin [Construction of apparatus for geophysical investigations of boreholes]: Moscow, Izdatel'stvo "Nedra," 180 p., illus., 1968.

275-023 **Zeman, Antonin.** Absolutní stářígünzského zalednění [Absolute age of the Günz glaciation]: [Czechlslovakia] Ustred. Ustav. Geol. Věstník, v. 43, no. 6, p. 401-403, 1968.

269-643 **Zemtsov, Ye. Ye.** Vliyaniye struktury neftegazovoy zalezhi na otrazheniye ot yeye podoshvennoy chasti [Effect of the structure of an oil- and gas-pool on reflections from its basal part]: Razved. Geofizika, no. 27, p. 8-13, illus., 1968.

273-261 **Zen, M. T.** On the possible relationship between the origin of andesitic rocks and the growth of continents: Bandung Inst. Technology Dept. Geology Contr., no. 65, p. 23-41, illus., tables, 1968.

274-458 **Zenkevich, N. L.** New bathymetric data on the northeastern Pacific, *in* Oceanographic research by the "Vityaz" in the North Pacific under the I.G.Y. program (translated from Russian, Akad. Nauk SSSR Inst. Okeanologii Trudy, v. 45, 1961): Springfield, Va., U.S. Clearinghouse Federal Sci. and Tech. Inf., p. 3-17, illus., 1969.

Zenkevich, N. L. See *Murdmaa, I. O. 274-465*

Zhadnova, V. P. See *Ben'ko, Ye. I. 264-516*

Zhakypbekov, A. See *Termetchikov, M. K. 270-422*

264-136 **Zhalkovskiy, N. D.; Tsibul'chik, G. M.; Tsibul'chik, I. D.** Zemletryaseniya Altaya i Sayan [Earthquakes in the Altay and Sayan], *in* Zemletryaseniya v SSSR v 1964 godu: Moscow, Akad. Nauk SSSR, p. 92-102, illus., table, 1967.

265-172 **Zhalkovskiy, N. D.; Tsibul'chik, G. M.; Tsibul'chik, I. D.** Zemletryaseniya Altaya i Sayan [Earthquakes in the Altay and Sayan], *in* Zemletryaseniya v SSSR v 1965 godu: Moscow, Akad. Nauk SSSR Izv. Fizika Zemli, p. 87-99, illus., tables, 1967.

266-166 **Zhalkovskiy, N. D.** Nekotoryye rezul'taty issledovaniy seysmichnosti Altaye-Sayanskoy gornoy oblasti [Some results of investigations of the seismicity of the Altay-Sayan mountain district], *in* Regional'nyye geofizicheskiye issledovaniya Sibiri: Novosibirsk, Akad. Nauk SSSR Sibirskoye Otdeleniye Inst. Geologii Geofiziki, p. 170-183, illus., tables, 1967.

265-155 **Zharkov, V. N.; Lyubimov, V. M.** Zatukhaniye radial'nykh kolebaniy Zemli [At tenuation of radial vibrations of the Earth]: Akad. Nauk SSSR Doklady, v. 177, no. 2 p. 318-321, table, 1967.

265-156 **Zharkov, V. N.; Lyubimov, V. M.** Teoriya vozmushcheniy dlya sferoidal'nyk kolebaniy Zemli [Perturbation theory for the spheroidal oscillations of the Earth] Akad. Nauk SSSR Doklady, v. 180, no. 2, p. 347-349, 1968.

267-150 **Zharkov, V. N.; Lyubimov, V. M.; Osnach, A. I.** O teorii vozmushcheniy dly sobstvennykh kolebaniy Zemli [On the perturbation theory for free oscillations the Earth]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 10, p. 3-16, 1968.

271-320 **Zharkov, V. N.; Kalinin, V. A.** Uravneniye sostoyaniya tverdykh tel pri vysokikh davleniyakh [Equation of state of solid bodies at high pressures]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 12, p. 3-19, illus., tables, 1968.

273-134 **Zharkov, V. N.; Lyubimov, V. M.; Movchan, A. A.; Movchan, A. I.** Obertnoy krutil'nykh kolebaniy Zemli dlya n=1 [Overtones of torsional oscillations of the Earth for n=1]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 1, p. 69-73, illus., tables, 1969.

Zharzhevskaya, B. A. See *Vikhirev, B. V. 264-196*

Zhdanov, V. V. See *Dortman, N. B. 266-483*

268-346 **Zhdanov, V. V.** O fizicheskoy sushchnosti plotnosti magmaticheskikh i metamorficheskikh porod i yeye geologicheskom znachenii [On the physical nature of density of igneous and metamorphic rocks and its geologic significance], *in* Simpozium po fiziko-mekhanicheskim svoystvam gornykh porod verkhney chasti zemnoy kory, Moscow 1964, Doklady: Moscow, Izdatel'stvo "Nauka," p. 56-65, tables, 1968.

Zhero, O. G. See *Surkov, V. S. 269-270*

Zhigalov, L. N. See *Besprozvannaya, A. S. 264-355*

Zhigalov, L. N. See *Driatskiy, V. M. 265-409*

269-419 **Zhigalov, L. N.** Magnitnyye vozmushcheniya v Antarktike (po dannym MGG) [Magnetic disturbances in the Antarctic (according to IGY data)]: Leningrad, Arktich. i Antarktich. Nauchno-Issled. Inst., Gidrometeorologicheskoye Izdatel'stvo, 104 p., illus., tables, 1967.

275-326 **Zhigalov, L. N.** Tsiklicheskiye izmeneniya magnitnoy vozmushchennosti na stantsiaykh Mirnyy i Vostok [Cyclic variations of magnetic disturbance at the Mirnyy and Vostok stations]: Sovetskaya Antarktich. Eksped. Inf. Byull., no. 53, p. 27-30, illus., 1965.

275-325 **Zhigalova, N. N.** Raspredeleniye magnitnoy aktivnosti v Arktike v period MGG [Distribution of magnetic activity in the Arctic in the IGY period]: Problemy Arktiki i Antarktiki, no. 29, p. 97-102, illus., table, 1968.

Zhigarlovskiy, I. M. See *Bortsov, V. D. 265-473*

Zhilin, V. N. See *Grin, N. Ye. 275-385*

267-270 **Zhilin, Yu. A.** Analiz meteorologicheskikh faktorov v gornykh porod [Analysis of meteorological factors in rocks]: Razved. Geofizika, no. 26, p. 62-68, illus., tables, 1968.

Zhiltsov, E. G. See *Bikkenina, S. K. 268-313*

Zhil'tsov, E. G. See *Suvorov, A. A. 270-410*

273-139 **Zhilyayev, I. I.; Rykunov, L. N.** Nekotoryye kharakteristiki nizkoskorostnykh magnitnykh zapisey kolebatel'nykh protsessov v diapazone periodov 1-30 sek [Some characteristics of low-speed magnetic records of vibrational processes in the 1- to 30-sec period range]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 2, p. 71-74, illus., 1969.

267-044 **Zhirov, K. K.; Kravchenko, M. P.; Platonenkov, A. G.** Izbytochnyy Ar-40 v nefeline [Excess Ar-40 in nepheline]: Geokhimiya, no. 3, p. 381-382, table, 1968.

272-039 **Zhirov, K. K.; Kravchenko, M. P.; Kravchenko, E. V.; Platonenkov, A. G.; Volkova, L. A.** Izbytochnyy argon v biotite [Excess argon in biotite]: Geokhimiya, no. 7, p. 866-869, table, 1968.

268-611 **Zhitkovskiy, Yu. Yu.** Izmereniye nerovnostey dna, ne registriruyemykh ekholotom [Measurements of irregularities of the bottom not recorded by the echo sounder (with English summ.)]: Okeanologiya, v. 8, no. 4, p. 759-760, illus., 1968.

Zhogolev, L. P. See *Brodovoy, V. V. 268-195*

Zhogolev, L. P. See *Brodovoy, V. V. 269-279*

271-354 **Zhukova, T. P.** Relationship between auroral absorption and geomagnetic activity: Geomagnetism and Aeronomy, v. 8, no. 4, p. 632-633, illus., 1968.

264-371 **Zhulin, I. A.** Instantaneous energy characteristics and transition to time-integral estimates of the energy of geomagnetic storms: Geomagnetism and Aeronomy, v. 8, no. 1, p. 80-83, illus., 1968.

266-433 **Zhulin, I. A.; Pushkov, V. V.** Vozdeystviye Solntsa na zemnyye yavleniya [Effect of the Sun on terrestrial phenomena]: Akad. Nauk SSSR Vestnik, no. 4, p. 43-45, 1968.

264-577 **Zhuravlev, V. P.** Opredeleniye udel'nogo soprotivleniya anizotropnykh plastov [Determination of the specific resistivity of anisotropic layers]: Prikladnaya Geofizika, no. 51, p. 170-186, illus., tables, 1968.

265-644 **Zhuravlev, V. S.; Svitoch, A. A.; Sokolova, N. A.** Metodika opredeleniya otnositel'nykh skorostey pod"yema solyanykh massivov kupolov po dannym seysmorazvedki [On the determination of the relative rate of uplift of salt dome massifs according to seismic survey data]: Akad. Nauk SSSR Doklady, v. 177, no. 1, p. 163-166, illus., 1967.

Zhurenko, Yu. Ye. See *Rozhdestvenskiy, A. P. 267-239*

Zhuvagin, I. G. See *Komarov, S. G. 273-507*

Zhuze, A. G. See *Molotkov, I. A. 275-138*

270-290 **Zhuzgov, L. N.** Pogreshnosti izmereniy s trekhkomponentnym ferrozondovym magnitometrom, ustanovlennym na vrashchayushcheysya platforme [Errors of measurement with a three-component fluxgate magnetometer mounted on a rotating platform]: Geofiz. Apparatura, no. 36, p. 45-53, illus., 1968.

266-471 **Zidarov, D.** Sur l'aimantation inductive des corps magnétiques possédant une aimantation permanente [On the inductive magnetization of magnetic bodies having a permanent magnetization]: Bolgar. Akad. Nauk Doklady, v. 19, no. 9, p. 783-786, 1966.

266-545 **Zienkiewicz, O. C.; Valliappan, S.; King, I. P.** Stress analysis of rock as a 'no tension' material [with French abs.]: Géotechnique, v. 18, no. 1, p. 56-66, illus., 1968

265-456 **Zietz, Isidore; Stockard, H. P.; Kirby, John R.** Transcontinental geophysical survey (35°-39° N)—Magnetic map from 63° to 74° W longitude: U.S. Geol. Survey Misc. Geol. Inv. Map I-536, scale 1:1,000,000, 1968.

Zietz, Isidore. See *Taylor, Patrick. 266-486*

267-457 **Zietz, Isidore.** Proposed aeromagnetic map of the United States: Geotimes, v. 13 no. 8, p. 22-25, illus., 1968.

Zilahi-Sebess, László. See *Varga, Ede. 270-381*

266-346 **Zil'bershteyn, S. I.; Yurkova, L. A.** Ekonomicheskiy effekt pri rabote mikrobaronivelirami MBNP [Economic effect in working with MBN microbarometric levels]: Razved. Geofizika, no. 25, p. 60-63, table, 1968.

265-365 **Zimin, S. S.** Osobennosti sostava intruzivnykh kompleksov giperbazitov i zonal nost' verkhney kantii v Glavnom antiklinorii Sikhote-Alinya [Features of the com position of the hyperbasite intrusive complexes and zonality of the upper mantle i the Main anticlinorium of Sikhote Alin]: Akad. Nauk SSSR Doklady, v. 177, no. 1, 167-170, illus., table, 1967.

Zimmerman, D. W. See *Aitken, M. J. 265-041*

Zimmerman, D. W. See *Mazess, R. B. 266-027*

Zimmerman, D. W. See *Aitken, M. J. 269-054*

270-018 **Zimmerman, Jean-Louis; Leutwein, Friedrich.** Contribution à l'étude de la libération de l'argon contenu dans les minéraux – Application a la méthode de datation K-A [Contributions to the study of the liberation of argon contained in minerals—Application to the K-Ar dating method]: Acad. Sci. Comptes Rendus, ser. D, v. 267, no. 1, p. 22-24, illus., 1968.

Zimmermann, Jean-Louis. See *Leutwein, Friedrich. 272-026*

Zimmermann, Jean-Louis. See *Leutwein, Friedrich. 274-016*

Zinger, Ye. M. See *Chizov, O. P. 264-241*

Zirin, H. See *Norton, R. H. 268-087*

Zmuda, A. J. See *Findlay, J. A. 274-314*

265-650 **Znamenskiy, V. V.; Leont'yev, D. N.; Pogrebinskiy, S. A.; Khvilevitskiy, M. O.** Glubinnoye stroyeniye Temir-Ittasayskoy zony po dannym MRNP [Deep structure of the Temir-Ittasay zone according to data of the controlled direction pickup method]: Neftegazovaya Geologiya i Geofizika, no. 6, p. 25-30, illus., 1968.

271-524 **Znamenskiy, V. V.; Khvilevitskiy, M. O.; D'yakonov, G. V.; Pogrebinskiy, S. A.; Fomenko, K. Ye.; Kalinin, V. N.** Rezul'taty glubinnykh issledovaniy MRNP po marshrutu Aktyubinsk—Aral-Sor [Results of deep investigations by the controlled direction pickup method along the Aktyubinsk-Aral Sor traverse]: Neftegazovaya Geologiya i Geofizika, no. 11, p. 28-31, illus., table, 1968.

Zobachev, N. M. See *Cherkasov, I. I. 265-099*

264-086 **Zohar, S.; Goldstein, R. M.** Venus map—A detailed look at the feature β: Nature, v. 219, no. 5152, p. 357-358, illus., 1968.

265-215 **Zohdy, Adel A. R.** Discussion of "An evaluation of some geophysical methods for water exploration in the Piedmont area," by T. J. Joiner, J. C. Warman, and W. L. Scarbrough (1968): Ground Water, v. 6, no. 4, p. 38-39, illus., 1968.

266-205 **Zohdy, Adel A. R.** A rapid graphical method for the interpretation of A- and H-type electrical soundings: Geophysics, v. 33, no. 5, p. 822-833, illus., table, 1968.

269-237 **Zohdy, Adel A. R.** The effect of current leakage and electrode spacing errors on resistivity measurements, *in* Geological Survey research 1968, Chap. D: U.S. Geol. Survey Prof. Paper 600-D, p. D258-D264, illus., 1968.

Zolotov, A. N. See *Bazanov, E. A. 275-171*

Zolotovitskaya, T. A. See *Aramirzoyev, R. A. 265-167*

267-571 **Zolotovitskaya, T. A.** K perspektivam neftegazonosnosti miotsenovykh otlozheniy Binagady-Khurdalanskoy ploshchadi po dannym avto-gamma-s''yemki i fiziko-khimicheskim parametram porod [On the oil and gas prospects of the Miocene formations of the Binagady-Khurdalan area according to data of a carborne gamma survey and the physical and chemical parameters of the rocks], *in* Nauchno-teoret. Konf. Molodykh Uchenykh, Materialy, Ser. Nauk o Zemle, V. 3: Baku, Izdatel'stvo Akad. Nauk Azerbaydzhan. SSR, p. 62-63, 1967.

Zolotovitskaya, T. A. See *Agamirozoyev, R. A. 268-148*

268-270 **Zomorrodian, Hossein.** Kritischer Vergleich einiger Methoden zur Bestimmung der Lotkrummung [Critical comparison of some methods for determination of plumbline deflection]: Deutsch. Geod. Komm. [Veroffentl.], Ser. C, Dissertationen, no. 118, 76 p., illus., tables, 1968.

272-182 **Zonneveld, J. I. S.** Quaternary climatic changes in the Caribbean and N. South America: Eiszeitalter u. Gegenwart, v. 19, p. 203-208, 1968.

271-387 **Zorilescu, Dan.** A mathematical model for estimating the mineralization of rock complexes on the basis of geophysical investigation: Rev. Roumaine Geologie, Geophysique, et Geographie, Ser. Geophysique, v. 12, no. 2, p. 115-123, illus., 1968.

Zorilescu, Dan. See *Ianas, Mihail. 272-213*

272-214 **Zorilescu, Dan.** Estimation des parametres des corps peturbateurs à l'aide de la methode Monte-Carlo et de la théorie de la programmation linéaire [Estimation of the parameters of disturbing bodies with the aid of the Monte Carlo method and the theory of linear programming]: Acad. Sci. Comptes Rendus, ser. B, v. 268, no. 10, p. 766-768, 1969.

274-226 **Zorilescu, Dan.** Two new proceedings for the analytical continuities of potential fields within the lower half-space, by using the Monte Carlo method and the algorithmes of the linear programming: Pure and Appl. Geophysics, v. 73, p. 19-24, 1969.

264-274 **Zorin, Yu. A.** Metodika vychisleniya anomaliy Graaf-Khantera i izostaziya v Pribaykal'ye (po povodu stat'yu A. V. Ladynina "Gravitatsionnyye anomalii v reduktsii Graaf-Khantera i izostaticheskoye sostoyaniye zemnoy kory v Zabaykal-'ye," Geologiya i Geofizika, no. 3, 1966) [Procedure for calculating Graaff-Hunter anomalies and isostasy in near-Baikalia (discussion of the paper by A. V. Ladynin, "-Gravity anomalies in Graaff-Hunter reduction and the isostatic state of the crust in Transbaikalia," Geology and Geophysics, no. 3, 1966)]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 1, p. 140-143, 1968.

273-288 **Zotikov, I. A.; Moiseveya, G. P.; Vilesov, Ye. N.** K voprosu o teplovom rezhime lednikov v zone ablyatsii [On the problem of the heat regime of glaciers in the ablation zone], *in* Uspekhi sovetskoy glyatsiologii: Vses. Glyatsiol. Simpoziuma, 3d, Frunze 1965, Materialy,p. 36-43, illus., 1968 (Izdatel'stvo "Ilim," Frunze).

272-376 **Zotkevich, I. A.** Anizotropiya magnitnoy vospriimchivosti porod i indutsirovannaya geomagnitnym polem namagnichennost' [Anisotropy of magnetic susceptibility of rocks and magnetization induced by the geomagnetic field]: Akad. Nauk SSSR Sibirskoye Otdeleniye, Geologiya i Geofizika, no. 12, p. 101-107, illus., tables, 1968.

270-421 **Zotov, S. V.** Pucheniye i fiziko-mekhanicheskiye svoystva gornykh porod Kyzyl-Kiyskogo burougol'nogo mestorozhdeniya [Swelling and the physical mechanical properties of the rocks of the Kyzyl-Kiy lignite deposit], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 41-64, illus., tables, 1967.

270-426 **Zotov, S. V.** Issledovaniye parametrov shtangovoy krepi [Investigations of the parameters of roof bolting], *in* Fiziko-mekhanicheskiye svoystva i ustoychivost' gornykh porod: Frunze, Akad. Nauk Kirgiz. SSR Inst. Fiziki i Mekhaniki Gornykh Porod, p. 93-102, illus., 1967.

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275-137 **Zubkov, S. I.** O raschete reologicheskimi metodami vremennogo khoda zapryazheniy v ochagovykh zonakh zemletryaseniy [On the calculation by rheological methods of the temporal course of stresses in the focal zones of earthquakes]: Akad. Nauk SSSR Izv. Fizika Zemli, no. 4, p. 3-13, illus., 1969.

269-236 **Zubkov, V. L.** Rezul'taty izucheniya uprugikh svoystv gornykh porod osadochnogo pokrova Volgo-Kamskogo kraya [Results of study of the elastic properties of the rocks of the sedimentary cover of the Volga-Kama district], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 191-195, illus., table, 1966.

269-713 **Zubkova, V. B.; Kasimov, R. S.** Ob utochnenii metodiki opredeleniya poristosti terrigennykh plastov po dannym sobstvennykh potentsialov v usloviyakh yugo-zapadnoy chasti Tatarii [On making more precise the procedure of determining porosity of clastic formations on the basis of data on self potentials in the conditions of the southwestern part of Tatary], *in* Novyye dannyye po geologii i razvedke nefti v Volgo-Kamskoy neftegazonosnoy oblasti: Kazan. Geol. Inst. Trudy, no. 14, p. 202-206, illus., table, 1966.

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267-587 **Zunnunov, F. Kh.** Stroyeniye Severnoy Fergany po dannym seysmorazvedki [Structure of the Northern Fergana according to seismic survey data]: Uzbek. Geol. Zhur., no. 3, p. 44-47, illus., 1968.

273-471 **Zunnunov, F. Kh.** Novyye dannyye o stroyenii Severnoy Fergany [New data on the structure of the northern Fergana]: Uzbek. Geol. Zhur., no. 1, p. 11-14, illus., 1969.

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